TURNING OBSTACLES INTO OPPORTUNITIES: A PRELIMINARY ASSESSMENT OF THE NEW CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

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TURNING OBSTACLES INTO OPPORTUNITIES: A PRELIMINARY ASSESSMENT OF THE NEW CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

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Abstract

of

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STATEMENT OF PROBLEM

Radical organizational change, such as the creation of a new department, can provide a unique opportunity to reexamine and rearticulate the direction of an organization, to identify strengths and weaknesses, and to assess the organization's overall effectiveness in achieving its goals. This study aimed to take advantage of such an opportunity created by the establishment of the new California Department of Public Health. More specifically, after reviewing pertinent literature to understand the historical context in which the new department was created, I conducted a survey of some of California's public health leaders at the state and local levels. The survey compared the department's current efforts with national standards for state-level public health departments to determine the extent to which California's public health programs are meeting national standards.

FINDINGS AND IMPLICATIONS

California's new Department of Public Health was created to increase public health leadership at the state level, create a more effective public health infrastructure, and increase accountability and effectiveness of the state's public health functions. Yet, this study found that some of these goals are perceived to remain challenges for the new Department of Public Health. Specifically, the greatest problems facing the new department seem to be insufficient resources, lack of partnership between the state and local public health programs, and the need for stronger public health leadership. This suggests that the creation of a new organization alone may not be enough to strengthen California's public health system. While the new department's ability to increase resources may be small, there might be opportunities to improve the new department's efficiency and effectiveness through stronger leadership and enhanced coordination and partnership with other entities in the public health system.

__, Committee Chair

Professor Edward Lascher

TABLE OF CONTENTS

List of Tables viii
List of Figuresix
Chapter
1. Seizing The Opportunity For Change1
2. Public Health In California: A History of Growth And Reform
The Local Role In California's Public Health System6
Public Health And Medicine: A Persistent Tension8
Recent Criticism of DHS10
3. Comparing California To National Public Health Standards14
Assessing Public Health: The Development And Use of National Public Health Standards14
4. A Survey of California's Governmental Public Health Leaders
Research Approach19
Limitations
Research Methods
5. Results23
Most Agree That National Standards Are Appropriate For CDPH23
CDPH Could Improve Implementation of Recommended Functions
What Accounts For The Variations In Perceptions? A Closer Look At The 17 Recommended Functions
6. Findings & Analysis
7. Conclusion & Recommendations
Appendix A. The 17 Recommended Functions43
Appendix B. Comparison of Mean and Standard Deviation Scores for the 17 Recommended Functions

Appendix C. Respondent Agreement with Recommended Functions and Perceived Effectiveness of Current State-Level Public Health Programs by State or Local Employment	45
Appendix D. Respondent Agreement with Recommended Functions and Perceived Effectiveness of Current State-Level Public Health Programs by Length of Public Health Career	47
Appendix E. Significance of Respondent Agreement with Recommended Functions and Perceived Effectiveness of Current State-Level Public Health Programs	49
Appendix F. Perceived Barriers to the 17 Recommended Functions by Percentage of Total Respondents	50
Appendix G. Perceived Barriers to the 17 Recommended Functions by Percentage of State and Local Respondents	51
Appendix H. Perceived Barriers to the 17 Recommended Functions by Length of Respondent's Public Health Career	52
Appendix I. Survey To California's Governmental Public Health Leaders	53
Bibliography	70

LIST OF TABLES

Table 2.1. A Side-by-Side Comparison of the Fields of Public Health and Medicine8
Table 2.2. Department of Health Services' Public Health and Medi-Cal Programs
Table 3.1. Institute of Medicine Recommended Functions of State Public Health Departments 16
Table 3.2. The 10 Essential Services of Public Health 17

LIST OF FIGURES

Figure 5.1.	Agreement with the Recommended Functions	24
Figure 5.2.	CDPH Performance of the Recommended Functions	25

Chapter 1

SEIZING THE OPPORTUNITY FOR CHANGE

Transformation of government organizations is often rare and slow-paced. However, radical organizational change, such as the creation of a new department, can provide a unique opportunity for widespread institutional change. It can be used as a tool to reexamine and rearticulate the organization's goals, to identify strengths and weaknesses, and ultimately to assess the organization's overall effectiveness in achieving its goals. It is a time for dialoguing and problem solving, for developing new leadership, and for strengthening existing teams and building new ones. Uniquely, times of change can also provide an opportunity to take risks, to try something new, and even to make some mistakes.

California had not maintained a distinct public health department since the early 1970s. Now, California's new Department of Public Health, created just months ago by the California Public Health Act of 2006, finds itself in a unique position to initiate broad organizational change. To date, the organization's new leadership has taken steps to capitalize on this opportunity by working to identify and rearticulate the department's goals, assess its strengths and weaknesses, and identify possible solutions for existing problems.

How else can the department's leadership capitalize on this rare opportunity? One way is to look back, to understand the context in which the new department was created. Presumably, those problems raised to justify the creation of a new department will also be addressed by that organizational change. Another way is to compare the department's current efforts with national standards that define what state public health departments should do and assess how well California's programs are measuring up. With this report I hope to do both.

This report is intended to serve as an additional evaluative tool to help inform the new leadership as the department moves forward with its strategic planning, assessment, and organizational evaluation. In Chapter 2, I will provide a historical context from which to analyze California's public health efforts, including a discussion of the local role in California's public health system, a discussion of the field of public health in relation to the field of medicine, and a discussion of the critique of the state's public health efforts leading up to the creation of a new department. In Chapter 3, I will describe the national movement toward developing public health standards and discuss two specific sets of recommendations for state public health departments. In Chapter 4, I will describe the research methods for and limitations of my survey to California's governmental public health leaders, and in Chapter 5, I will present the results from this survey. In Chapter 6 I will summarize and analyze my survey findings and in Chapter 7 I will present recommendations for the department's leadership.

Chapter 2 PUBLIC HEALTH IN CALIFORNIA: A HISTORY OF GROWTH AND REFORM

The State of California has maintained organizations that perform public health functions since the State Board of Health and Vital Statistics was formed in 1870 (California State Archives, n.d., p. 3). The first California Department of Public Health was created in 1927, and housed divisions for communicable diseases, sanitation, public health education, vital statistics, as well as state laboratories (Hurt, 1937, p.201). Throughout the mid-20th Century, the state's public health programs expanded to include: adult health, community health services, environmental health and consumer protection, maternal and child health, oral health, preventative medical services, public health nursing, and venereal diseases. Public Health laboratory responsibilities ranged from bacteriological labs, to labs focusing on food and drug, industrial hygiene, sanitation, viral and ricketsial disease, and laboratory field sciences. Modern public health programs include an emphasis on prevention of chronic diseases, such as diabetes, heart disease, and stroke; as well as the environmental determinants of health—those things in the environment that can impact health such as tobacco smoke, radiation, lead, social norms and cultural traditions (Breslow, 2006).

History suggests that the organization of California's state-level public health programs has always been fluid. At times, California's public health programs have been organized together under one public health department, and at other times these programs have been consolidated with other health services. The most recent programmatic reorganizations in 1973 and 1978 illustrate the justifications for such a fluid organizational structure. In 1973, Governor Ronald Reagan's Reorganization Plan of 1970 swept the last Department of Public Health, along with the Departments of Mental Hygiene and Health Care, under the umbrella of the Department of Health in an attempt to consolidate authority, responsibility and administrative functions, and to improve programmatic efficiencies (California State Archives, n.d., p. 6; Fowler, 1986, p. 77). This large Department of Health was intended to address problems of "fragmentation and duplicative health services in California" by improving coordination through a consolidation of state health programs (Fowler, 1986, p. 76-78). The new Director, Dr. James Stubblebine, said that the departments were merged to "provide highquality service to all the people of California at considerable administrative savings" (Department of Health, 1973).

However, the promises of coordination and improved efficiencies never panned out as planned and another reorganization followed shortly. In 1978 the Department of Health Services was created to address the following criticisms of the Department of Health:

- "The department did not promote the effective coordination of existing programs or planned programs.
- The department did not provide clear, consistent policy leadership.
- The department failed to achieve significant cost savings.
- The department was considered unresponsive by the legislature and by a large number of special interest groups" (Fowler, 1985, p. 144.)

Under the new Department of Health Services, the state co-housed its Medi-Cal programs and the majority of its public health programs—a practice which some states do to promote integration, coordination, and an opportunity for synergy between these two functions (Scutchfield & Keck, 1998). The Department was tasked with the broad mission of "[protecting] and [improving] the health of all Californians" (California

Department of Health Services [CDHS], 2002) and administered a broad range of health programs with an emphasis on primary care and family health, public health, environmental health, and county health including the state's Medi-Cal program. With a goal to "optimize state and local public health capacity," "improve coverage and access," and "foster integrated service delivery," the department's last strategic plan seems to support the assumption that the department was created with the intention to integrate the state's public health and medical services programs (CDHS, 2002).

As organized, the Department of Health Services did not house all of the state's public health programs. The Office of Statewide Planning and Development administered programs that promote health care access in California. The Emergency Medical Services Authority developed and reviewed local emergency medical service plans, coordinated medical and hospital disaster preparedness, and established standards for emergency medical services personnel. Still, other public health programs were housed in the Managed Risk Medical Insurance Board (responsible for administration of public health insurance programs for special populations), two offices within the California Environmental Protection Agency (the Office of Environmental Health Hazard Assessment responsible for environmental risk assessment and the Department of Toxic Substances Control responsible for regulation of hazard waste management), the Office of Emergency Services (responsible for oversight of statewide emergency response); and the Department of Consumer Affairs (responsible for licensing health professionals) (California Assembly, 2006, p.6-7).

In addition to the public health programs and organizations housed at the state level, a considerable amount of California's public health work is done at the local level by local public health departments. Understanding how local public health departments interact with the state-level public health programs and organizations, and how they contribute to the state's public health efforts is critical for assessing the strength of California's public

health system.

THE LOCAL ROLE IN CALIFORNIA'S PUBLIC HEALTH SYSTEM

Within the United States, the structure of the relationship between state and local health departments varies. In some states the relationship is "centralized," meaning that state health departments have direct authority over local health departments, while many other states organize around a "decentralized" structure where local governments have direct authority over local health departments. The relationship can also be structured in a "mixed" system where both state and local government share the authority for the local health department. In California, the relationship between state and local health agencies can be characterized as a "mixed" system, meaning "local health services are provided by a combination of the state agency, local government, boards of health or health departments in other jurisdictions" (National Association of County and City Health Officers, 1998).

Local health departments are often referred to as the "front line" or "first responders" of the public health system. They provide a wide range of public health services, but their main responsibilities are to provide health education, environmental health services, and personal health services, and conduct inspections (Institute Of Medicine [IOM], 1988, p. 186). Activities of local health departments include: "conduct[ing] communicable disease control programs; provid[ing] screening and immunizations; collect[ing] health statistics; provid[ing] health education services and chronic disease control programs; conduct[ing] sanitation, sanitary engineering, and inspection programs; run[ning] school health programs; and deliver[ing] maternal and child health services, public health nursing services, mental health services, and other home care and ambulatory care services" (IOM, 1988, p.183).

In California, local health departments are responsible for a broad range of activities

including, acting as "first responders to any public health threat," monitoring and "identify[ing] unusual disease occurrences," "control[ing] the spread of diseases such as meningitis, HIV, hepatitis C, and Chlamydia, among others," and "detect[ing] and respond[ing] effectively to public significant threats, including major outbreaks of infectious disease, pathogens resistant to antimicrobial agents, and acts of bioterrorism" (Senate Health Committee, 2005).

Two important organizations represent California's local health departments: the California Conference of Local Health Officers (CCLHO) and the County Health Executives Association of California (CHEAC). CCLHO was created in 1947 by the Local Public Health Assistance Act to "approve rules and regulations regarding standards to be met by local health departments receiving state financial assistance and to approve standards of education and experience for professional and technical personnel employed in local health departments" (Philp & Merrill, 1956, p. 1505). In the past, CCLHO was characterized as "a true partner of the State Health Department" that was regularly involved in discussions regarding the department's "major decisions" (Philp & Merrill, 1956, p. 1509). Today, CCLHO is still required, by statute, to "advise the Department of Health Services [and post July 1, 2007, the Department of Public Health], other departments, boards, commissions, and officials of federal, state and local agencies, the Legislature and other organizations on all matters affecting health" (California Conference of Local Health Officers [CCLHO], n.d.). CHEAC describes itself as "a statewide organization of county Health Department and Agency Directors, who are responsible for the administration, oversight, and administration of a broad range of local public health and individual health care services" (County Health Executives Association of California [CHEAC], n.d.). Unlike CCLHO, the partnership between CHEAC and the state's Department of Public Health is not mandated in statute. However, CHEAC still has a role in advising California's leadership on a broad range of public health and

individual health care services issues.

PUBLIC HEALTH AND MEDICINE: A PERSISTENT TENSION

Public health and medicine are both essential components of the national health system. In general, medicine focuses on the health of individual patients by diagnosing symptoms and caring for sick individuals. In this way, the field of medicine can be characterized as reactive. Public health generally focuses on the health of populations by assessment and monitoring of disease and developing population-based interventions that target social norm and environmental change (Lasker, 1997, p.3). Because the field of public health focuses on prevention, it can be characterized as proactive.

Public Health	Medicine
 Focus on populations Emphasis on prevention Emphasis on non-biological determinants of health, safety-net primary care Based on epidemiology, biostatistics, social sciences Practitioners primarily employed by organizations, government agencies Fixed budgets Source: Lasker, 1997, p. 21. 	 Focus on individual patients Emphasis on diagnosis and treatment Emphasis on biological mechanisms of disease Based on biology, chemistry, physics Practitioners primarily self-employed, in private sector Payment fee-for-service or cost basis

Table 2.1. A Side-by-Side Comparison of the Fields of Public Health and Medicine

Both public health and medicine share similar broad missions: to ensure and improve the health of people. Historically, the two fields had a collaborative relationship, particularly in the early 20th Century when infectious diseases threatened all segments of the population equally. At that time, the role of the two fields was clear: physicians were to diagnose disease and care for individual patients while public health professionals monitored and assessed the environmental systems that were responsible for disease transmission (Lasker, 1997, pp. 11-13). Yet, with the rise of chronic diseases in the mid-20th Century, both fields developed segregated methods for addressing disease. Medicine relied on procedures and drugs to treat disease, while public health focused on identifying and minimizing the risk factors associated with diseases. While work in the two fields was complimentary, in many cases it was not integrated in practice (Lasker, 1997, pp. 15-17).

One recent study sponsored by the American Medical Association and the American Public Health Association examined perceptions of professionals in each field and found that while they believed that the two fields were closely related, they expressed misunderstandings of the activities, beliefs, perspectives, and relevancy of the work of individuals specializing in the other field (Lasker, 1997, p. 7). If this tension was also apparent in the two halves of California's Department of Health Services—the one with a focus on Medi-Cal and more closely tied to the field of medicine, and the other with a focus on public health—it might, in part, explain the evolution of California's public health programs from a separate department, then into a consolidated health department, and now back into a separate department again.

In the most recent iteration of California's Department of Health Services, it seems that the two fields might have been brought together in an attempt to forge collaborative relationships that promote integration, reduce duplication of efforts, and provide services more efficiently. However, if California's public health and medical programs share the perceptions of those professionals in the previous study, an underlying sense of competition or misunderstanding might have fed the desire or political will to separate again. In California, at least, it seems unclear how to best organize these two essential fields so that they can achieve their missions together. Now, as the new Department of Public Health moves away from the Department of Health Care Services, it seems important to remember the fields' shared mission and history, and to recognize that in California, this sort of separation has happened before and that integration may happen again.

RECENT CRITICISM OF DHS

In recent years, public health advocates criticized DHS, arguing that the state's Medi-Cal program overshadowed public health programs in terms of share of the department's budget and attention from the department's leadership. The Legislative Analyst's Office found that in 2003-2004, DHS was "projected to dedicate over 48% of its staff and 96% of its total resources to health service delivery (for Medi-Cal and other health care programs)" and that "the distribution of resources may have an effect on the focus of DHS and its leadership on the Medi-Cal program" (as cited in Senate Health Committee, 2005).

At a recent forum on the transformation of public health in California, one public health professional joked that "Public Health could be a rounding error in Medi-Cal's budget," but then went on to discuss how money invested in public health's preventative programs could in the long run reduce the state's medical expenses (Center for Health Improvement, 2007). This argument seems to typify some of the logic for the creation of a separate public health department—that public health, under the Department of Health Services, was not funded adequately, but if separated public health could focus on prevention work which would, overtime, result in a large cost-savings to the state in the form of improved health status of the overall population.

Public Health Programs	Medi-Cal Programs
 AIDS Binational Boarder Health Chronic Disease and Injury Control Communicable Disease Control Disease Control Drinking Water and Drug and Radiation Safety Environmental and Occupational Environmental Management Genetic Disease Health Information and Laboratory Science Licensing and Certification Maternal, Child & Adolescent Health/ Office of Family Planning Preparedness Public Health Emergency Strategic Planning Women, Infants, and Children 	 Audits & Investigation California Children's Services Child Health & Disability Prevention Children's Medical Services Clinical Preventive Medicine Foster Care Genetically Handicapped Persons Long Term Care Medi-Cal Managed Care Medi-Cal Operations Medi-Cal Procurement Medical Therapy Program Newborn Hearing Payment Systems Primary and Rural Health Care Systems

Table 2.2. Department of Health Services' Public Health and Medi-Cal Programs

In addition, the large-scale devastation caused by man-made and natural disasters, including the 2001 anthrax attacks and the destructive Hurricane Katrina, has focused on the state's policy agenda. In the years following the 2001 events, a number of organizations issued investigatory reports on California's ability to prepare for and respond to large-scale disasters and public health emergencies. These reports found:

- A weak public health data and information system (Little Hoover Commission [LHC], 2003; RAND Corporation [RAND], 2004);
- A lack of investment in intellectual capital, particularly those with scientific expertise, resulting in staff shortages (LHC, 2003; RAND, 2004, RAND 2006);
- Understaffed, under-equipped, and disconnected public health labs (LHC, 2003);
- An erosion of the quality of information and assistance offered by the state to local health departments (LHC, 2003) and lack of resources devoted to technical assistance (RAND, 2004);
- A lack of strong, central leadership and coordination in public health (LHC, 2003;

RAND, 2004; RAND, 2006);

- Ambiguity of roles for local health jurisdictions, other local agencies, and DHS leading to redundancies and inefficiencies (RAND, 2004); and
- A steady decline in the amount of funding going to local health departments for public health activities (LHC, 2003) and a greater reduction of funds to the state's public health programs compared to Medi-Cal programs (Legislative Analyst's Office [LAO], Letter, 2004, p.7).

Together, these reports called for additional resources to strengthen DHS' public health emergency preparedness programs, but also suggested that the most effective means to improving the state's public health capacity and addressing these problems would be through the creation of a new Department of Public Health. The logic of this argument is most clearly articulated in the Senate Health Committee Analysis of Senate Bill 162:

"Public health programs and goals are constantly overlooked and overshadowed by the Medi-Cal program. Further, several independent studies have concluded that California suffers from a severe lack of strong and effective state public health leadership. A new department would create the opportunity to build strong leadership, resulting in increased protection of the public health and safety for Californians" (Senate Health Committee, 2005).

If a new Department of Public Health was created, these reports suggested the reorganization might result in increased public health leadership, improved potential for the new department to compete for state resources, expedited budget decisions, and new opportunities to apply for funds (Senate Health Committee, 2005). Interestingly, the need for public health leadership and improved coordination of public health programs are problems that seem to have persisted regardless of the organization of the state's public health functions.

With much support from the local public health departments and the broader public health community, in September 2006, Governor Schwarzenegger signed into law Chapter 241, or the California Public Health Act of 2006, establishing a new California Department of Public Health. Effective July 1, 2007, responsibility for the public health programs previously housed in the Department of Health Services would be transferred to the new Department of Public Health, while new Department of Health Care Services would house the remaining programs. The state's public health programs that were housed outside the Department of Health Services would remain in their respective departments and agencies. Notably, this legislation established a budget neutrality clause which specified that no new funds would be appropriated to the Department of Health Services for reorganization purposes.

Chapter 3 COMPARING CALIFORNIA TO NATIONAL PUBLIC HEALTH STANDARDS

In his bill signing address, Governor Schwarzenegger discussed how "the creation of a new Department of Public Health will provide more focused leadership in public health...at the state level; create a more effective public health infrastructure in California...and increase accountability and improve program effectiveness for the public health...functions of state government" (California Office of the Governor, 2006). Yet, it is still not clear how moving the state's public health programs from one department to another will result in these outcomes. And, maybe most importantly, it is not clear how the new department will make all of these improvements without additional resources. What changes might be the most important to make? Are some changes easier to make than others? Would some changes have a greater impact on outcomes than others?

Presumably, if California's public health programs were effectively performing all of the recommended functions of state public health departments, there would have been no reason for a massive reorganization. Yet, to the best of my knowledge, there has yet to be a study examining if and how well California's public health programs are meeting national public health standards. By understanding how the national standards apply to California, and assessing how well California's programs are meeting those standards, I hope to provide some guidance on how to begin to answer some of these important questions.

ASSESSING PUBLIC HEALTH: THE DEVELOPMENT AND USE OF NATIONAL PUBLIC HEALTH STANDARDS

The following section describes two sets of national recommendations for state public

health departments. The first set of recommendations was derived from a report published in 1988 by the Institute of Medicine, entitled The Future of Public Health, which defined separate and specific responsibilities for governmental public health organizations at the national, state, and local level. This report inspired a national conversation about the country's public health system and led to the second set of recommendations, the 10 Essential Services of Public Health, developed in 1994 by the Core Public Health Functions Steering Committee. More broadly defined, these 10 Essential Services reflect responsibilities of the nation's entire public health system.

The Future Of Public Health's Recommended Functions For State Public Health Departments

In 1988 the Institute of Medicine (IOM) issued a report, *The Future of Public Health*, based on a two-year study of public health in the United States. In this report, the IOM's Committee for the Study of the Future of Public Health sought to address the perception that the United States "[had] lost sight of its public health goals and [had] allowed the system of public health activities to fall into disarray" (p. 19). The report stressed the need for an effective, organized, and comprehensive public health system, led by the public sector, in order to address the broad scope of public health issues, including infectious and communicable diseases, chronic diseases, injury, family health, smoking and substance abuse, toxic substances (including contamination in water, air, soil and food), and age-related diseases.

To improve the nation's public health system, the IOM issued recommendations for defining the mission of public health and clarifying the roles, responsibilities and functions of public health at each level of government. The IOM (1988) found that "the core functions of public health agencies at all levels of government are assessment, policy development, and assurance," but that each level of government had specific responsibilities toward fulfillment of the public health mission to "fulfill society's interest in assuring conditions in which people can be happy" (p. 7). The Committee argued that states, as the "central force in public health," "bear primary public sector responsibility for health" (p. 8). Table 3.1. captures the Committee's recommendations for the public health responsibilities specific to states.

Table 3.1. Institute of Medicine Recommended Functions of State Public Health Departments

- 1. Assess health needs in the state based on statewide data collection.
- 2. Assure an adequate statutory base for health activities in the state.
- 3. Establish statewide health objectives, delegating power to localities and holding them accountable.
- 4. Assure appropriate organized statewide effort to develop and maintain essential personal, educational, and environmental health services.
- 5. Guarantee a minimum set of essential health services.
- 6. Support of local service capacity, especially when disparities in local ability to raise revenue and/or administer programs require subsidies, technical assistance, or direct action by the state to achieve adequate service levels.
- 7. Clearly delineate the basic authority and responsibility entrusted to public health agencies, boards, and officials at the state and local levels and the relationships between them.

Source: Adapted from the Institute of Medicine's The Future of Public Health, 1988, p. 8-10.

The body of recommendations included in the IOM's The Future of Public Health particularly those around the core functions for all public health agencies, namely, assessment, policy development, and assurance—served as the framework for later efforts to clarify, define, and standardize the role of public health. More than 20 years after publication, this set of recommended functions continues to serve as a reference for public health organizations.

The 10 Essential Services Of Public Health

Developed in 1994 by the Core Public Health Functions Steering Committee, a body composed of individuals representing public health agencies and organizations across the nation, the 10 Essential Services of Public Health were designed to provide a broad "guiding framework for the responsibilities of local public health systems" (Centers for Disease Control and Prevention [CDC], n.d., Essential Public Health Services). These

essential services continue to serve as a widely cited model for public health departments,

both at the state and local levels, to define the activities for which they are responsible

and to serve as the foundation for the national public health performance standards

program.

Table 3.2. The 10 Essential Services of Public Health

- 1. Monitor health status to identify community health problems.
- 2. Diagnose and investigate health problems and health hazards in the community.
- 3. Inform, educate, and empower people about health issues.
- 4. Mobilize community partnerships to identify and solve health problems.
- 5. Develop policies and plans that support individual and community health efforts.
- 6. Enforce laws and regulations that protect health and ensure safety.
- 7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
- 8. Assure a competent public health and personal health care workforce.
- 9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
- 10. Research for new insights and innovative solutions to health problems.

Source: The Institute of Medicine, The Future of the Public's Health in the 21st Century, p. 99.

National Public Health Performance Standards

Following the publication of the 10 Essential Public Health Services, the Centers for Disease Control and Prevention in partnership with national, state, and local public health organizations created the National Public Health Performance Standards Program to "measure public health practices at the state and local levels [to] improve quality and performance, increase accountability, and increase the science base for public health practice" (IOM, 2003, p. 156; CDC, n.d., NPHPSP). This group developed measurable performance standards, based on the 10 Essential Public Health Services, for both localand state-level public health departments and for local public health governance. The goal was to develop instruments that would provide a means for standardized comparison of the delivery of public health services across the nation. The State National Public Health Performance Standards (NPHPS) State Public Health System Performance Assessment Instrument is a comprehensive survey that targets "state public health agencies and other partners that contribute to public health services at the state level" (CDC, State, p. i). The Association of State and Territorial Health Officials (ASTHO), a national organization composed of chief health officials of state and territorial public health agencies, administered a survey to their membership in 2005-2006 to determine states' use of the NPHPS tool. ASTHO reported that of the 40 state public health representatives who responded, a limited number relied on the national performance standards tool: 25% reported using only the NPHPS, 3% reported using the NPHPS in addition to standards developed in-state, and 28% reported using only performance standards developed in-state (p. 6). To the best of my knowledge, California has not yet begun an assessment of the state's public health programs using the national performance standards nor has it developed a unique set of California-specific public health standards on which to assess the state's performance.

Chapter 4 A SURVEY OF CALIFORNIA'S GOVERNMENTAL PUBLIC HEALTH LEADERS

Since the publication of The Future of Public Health in 1988, a number of organizations have used the recommendations from that study to assess how well the nation's state and local public health organizations were measuring up to the IOM's recommendations regarding the core functions of public health departments (Scott, Tierney, & Waters, 1990; Handler & Turnock, 1996; Scutchfield, Hiltabiddle, Rawding, & Violante, 1997). Additionally, the National Public Health Performance Standards Program developed measurable performance standards, based on the 10 Essential Public Health Services, to assess both local- and state-level public health departments. By comparing California to these two sets of national standards, this study attempts to recreate, in part, these past efforts in order to determine the extent to which California's governmental public health leaders agree that these standards are appropriate for California, to identify particular areas for improvement of performance of these functions, and to identify potential barriers to the success of California's new Department of Public Health.

RESEARCH APPROACH

I surveyed California's governmental public health leaders about the body of recommendations in both the 10 Essential Public Health Services and the Institute of Medicine's The Future of Public Health. The 17 recommended functions were based completely on the actual language use by the Institute of Medicine in Future of Public Health and by the Core Public Health Functions Steering Committee in the 10 Essential Services of Public Health (see Appendix A for a list of the 17 recommended functions). For each of the 17 recommended functions, the respondents were asked the extent to which they agreed with the recommended function; how effectively they thought California's current state public health programs were providing the function; and what barriers they attributed to the state's performance (see Appendix I for a copy of the survey).

To measure potential barriers, respondents were provided with a consistent list of items selected to reflect those factors that stood out in a survey of the literature as barriers or challenges for state public health departments, and also to reflect some factors that were used as justification for the need to create a new California Department of Public Health. In some cases the literature was vague in defining a barrier. In these instances I created sub-categories of variables in an attempt to better articulate the possible challenges facing the new department. For example, much of the literature mentioned "leadership" as important for public health departments. To help clarify what might be understood by a need for "leadership," I created two variables, "state-level leadership through action" and "state-level leadership through vision."

Data were collected primarily through an electronic survey sent to the California Conference of Local Health Officers (CCLHO), the County Health Executives Association of California (CHEAC), and the California Department of Health Services Public Health Transition Team (Transition Team) in June 2007. In total, the survey population comprised of 203 individuals from state and local health departments, including 50 individuals representing CCLHO; 10 individuals representing both CCLHO and CHEAC; 93 individuals representing CHEAC; and 48 individuals representing the Transition Team.

Of the 203 individuals approached, 85 individuals (or about 42%) participated in the survey. It should be noted that not all individuals who participated in the survey answered the demographic questions; however, of those who responded, 20% selfidentified as state public health employees; 50.6% self-identified as local public health employees; 44.7% self-identified as having public health careers spanning 0-19 years; and 25.9% self-identified as having public health careers spanning 20 or more years. This response rate is approximately proportionate to the sample population that was composed of about 23% state public health employees and 77% local health department employees. Additionally, at least one representative from 52.4% of the state's local health departments participated in this survey.

LIMITATIONS

The survey population itself represents the key limitation of this study for a number of reasons. First, the survey population could be seen as too narrow. This survey focused only on those in state and local government because they represent those most responsible for the integrity of California's public health system. Second, the target population is known to be a heavily surveyed group. Surveying these groups risks low response rates due to survey fatigue. Third, the timing might not have been ideal for a large number of those approached. The distribution of the survey coincided with the weeks preceding the creation of the new Department of Public Health—a time in which the members of the Transition Team might be too busy transitioning their own programs to the new department to participate in additional activities, such as this survey. Fourth, the electronic survey format might not have been ideal for a number or respondents who were unreachable during the period of study—as indicated by undeliverable mail or out of the office messages. This was the case for two of the 60 (3%) CCLHO members, 14 of the 103 (13.5%) CHEAC members, and 12 of the 48 (25%) Transition Team members.

Additionally, a number of individuals indicated their non-participation was due to the length of the survey, the length of their tenure in public health (they were too "new"), or that another individual from their organization had responded on their behalf.

Low response rates might not allow for strong statistical comparisons, so in future

studies, it might be more appropriate to broaden the survey population to include greater representation from both state- and local-level public health employees, as well as individuals from other sectors of the state's public health system.

RESEARCH METHODS

Data were analyzed using a combination of statistical methods. First, using a frequency analysis, I identified patterns of consensus in both the respondents' agreement with and perceptions of effectiveness of the recommended functions. I analyzed standard deviation and mean scores to determine the extent to which California's governmental public health leaders exhibit consensus with the nationally established recommended functions and to gauge the extent to which California's public health programs are in compliance with the national standards (see Appendix B). Next, using cross-tabulations, I examined the impact of both a respondent's tenure in the public health field (see Appendix D) and employment in a local or state public health department on his or her perceptions (see Appendix C), and then tested the statistical significance of the differences in respondents' perceptions using a chi-square test (see Appendix E). I finally examined the "barrier" variables using frequency analysis to determine which of the variables seem to represent the greatest potential barriers (see Appendix F). I used a chisquare test to measure the statistical significance of the difference of perceptions between respondents with longer careers compared to those with short careers (see Appendix H) and between respondents who worked in state public health departments with those who worked in local public health departments (see Appendix G). Because the sample size is relatively small, I reported all significance scores at the .10 level and below.

Chapter 5

RESULTS

MOST AGREE THAT NATIONAL STANDARDS ARE APPROPRIATE FOR CDPH

In general, California's governmental public health leaders agreed that the 17 recommended functions were appropriate for California's new Department of Public Health (see Figure 5.1.). On average, the respondents "completely agreed" with a majority of the recommended functions, as indicated by mean scores closer to "4," and moderately agreed with recommended functions 13 and 15, as indicated by mean scores closer to "3." A significant portion of California's governmental public health leaders indicated moderate disagreement with the recommendation that CDPH should link people to needed personal health services and assure the provision of health care when otherwise unavailable (7). Consistently, data show that the respondents' selections varied the greatest regarding these three recommended functions, as indicated by relatively high standard deviation scores (see Appendix B: Comparison of Mean and Standard Deviation Scores for the 17 Recommended Functions).

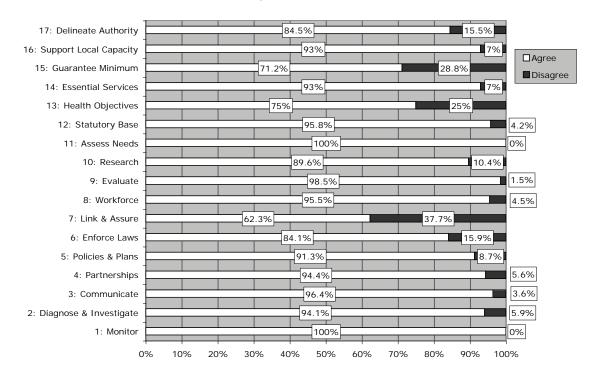


Figure 5.1. Agreement with the Recommended Functions

Do California's Public Health Leaders Agree With the Recommended Functions?

CDPH COULD IMPROVE IMPLEMENTATION OF RECOMMENDED FUNCTIONS

Data suggest that California's governmental public health leaders perceive a need for improvement in the state's current implementation of the 17 recommended functions (see Figure 5.2.). On average, the respondents indicated that the state's current public health programs were "somewhat ineffective" in implementing the majority of the 17 recommended functions, as evidenced by mean scores between "2" and "3," and that respondents indicated some level of consensus about these perceptions, as indicated by relatively low standard deviation scores (see Appendix B).

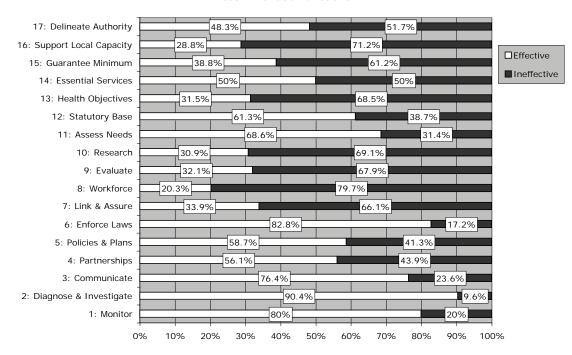


Figure 5.2. CDPH Performance of the Recommended Functions



WHAT ACCOUNTS FOR THE VARIATIONS IN PERCEPTIONS? A CLOSER LOOK AT THE 17 RECOMMENDED FUNCTIONS

Below, the 17 recommended functions are grouped into four artificial categories in order to help draw out any potentially broader issues for the new California Department of Public Health. These four categories represent the following over-arching roles for California's new department:

- 1) Track, Identify, Research and Communicate California's Health Problems;
- 2) Establish and Enforce Statewide Health Policies;
- Provide and Ensure Health Services, including Assurance of a Competent Workforce; and
- 4) Collaborate to Build Partnerships and Networks in California's Health System.

The 17 recommended functions are referenced, by number, in the text below.

1. Track, Identify, and Research and Communicate California's Health Problems

The nationally-established recommended functions suggest that state public health departments should identify (1) and investigate (2) both existing and potential health problems and health hazards; develop a statewide system to measure and track the state's health problems (11); develop solutions to address the state's health problems (10); and ultimately inform, educate, and empower people about important health issues (3).

Why might some public health leaders disagree with these recommendations?

In general, California's governmental public health leaders strongly agreed that the new CDPH should track, identify, and research and communicate information regarding the state's health problems. Interestingly, the data indicates that local public health employees were statistically much more likely to disagree with the recommendation that the state should be responsible for researching health problems (10) than were state public health employees (see Appendix E). Although the data cannot produce any conclusive reasons why some respondents, and especially local public health employees, disagreed with this recommendation, it does suggest that some respondents feel this function does not align with their perceptions of what state health department should do. As indicated by write-in responses, some respondents felt that researching solutions to health problems might be more appropriate for universities or other research institutions and that identifying best practices and transitioning research findings into practices at the local level might be more appropriate roles for the state public health department.

Why might some public health leaders perceive ineffective delivery of these functions?

Compared to the other recommended functions, respondents seemed to indicate that the state's current efforts to perform these functions were fairly effective. However, a large percentage of respondents, nearly 70%, indicated some problems with the state's performance in researching health problems (10). Additionally, data suggests that of the 31% of respondents who perceived the state's current public health programs were ineffectively assessing California's health needs (11), both local public health employees and respondents with longer careers in the field of public health were more likely to perceive a need for improvement (see Appendix E).

Overall, data suggest that the greatest potential barriers to the state's ability to track, identify, research, and evaluate California's health problems are sufficient funding and staffing, the state's partnership with local health departments, and state-level leadership through vision (see Appendix F). Additionally, there seem to be some consistent differences in how state (compared to local) public health employees and respondents with long (compared to short) careers in public health viewed challenges to these functions. Data indicate that when compared to respondents with shorter public health careers, those who have worked in the field for 20 or more years were statistically more likely to indicate that the state's partnership with local health departments, state-level leadership through vision, and staff competency were important barriers. Conversely, those with shorter public health careers tended to emphasize the need for resources in three out of five of these functions (see Appendix H). Data also suggest that state public health employees were more likely than local public health employees to emphasize the need for both funding and staffing, and to a lesser degree, relevant training, while local public health employees were more likely to emphasize the importance of the state's partnership with local health departments and with the local community (see Appendix G).

If "research is not [the] highest priority of a public health practice leader," as one respondent wrote, it seems safe to assume that research functions would not receive large amounts of funding, especially in tight budget years. Over time the research function may become deficient in resources and staffing. Another respondent succinctly reasoned that it was "hard to do quality research when you can't hire the staff to do the work."

Respondents' comments emphasized the particular challenge of assessing statewide health issues (11) with a "lack of statewide standardized public health software" and seemed to articulate a need for an integrated data system to evaluate population health issues as a whole. These perceived barriers might suggest that data are not collected uniformly and are not easily transferable. As one respondent said, local health departments developed "unique" or "home-grown" information systems. Developing an integrated information system across localities and interoperable with the state's system could be a costly endeavor. But on the bright side, one respondent suggested that current activities, specifically, the Robert Wood Johnson Common Grounds grant to the Health and Human Services Agency, might help to integrate and improve the state's public health data system.

2. Establish and Enforce Statewide Health Policies

Based on the nationally-formulated recommended functions, a state public health department should develop policies and plans that support individual and community efforts to improve health (5); develop a statutory base for health activities in the state (12); and enforce laws and regulations that protect health and ensure safety (6).

California's governmental public health leaders seemed to strongly agree with all of these recommended functions, but state public health employees in particular were much more likely to indicate agreement with the recommendation that the state Department of Public Health develop policies and plans (5) than were local public health employees (see Appendix E). Data also seemed to suggest that the majority of respondents thought the state's current implementation efforts could be more effective.

Respondents seemed to indicate fairly consistently that lack of resources (both

sufficient funding and staffing), the need for partnerships (with the local community, and especially with local health departments), and the need for leadership were among the greatest challenges for the state's current efforts in establishing and enforcing statewide health policies (see Appendix F). Again, a consistent disconnect arose between the perceptions of state and local public health employees and between respondents with long public health careers and those with shorter public health careers. While both state and local public health employees indicated that partnership with local health departments was important, local public health employees seemed to place a much greater emphasis on the importance of this partnership than state public health employees (see Appendix G). Additionally, respondents with public health careers spanning 20 or more years were more likely than those with shorter careers to emphasize the need for sufficient funding, a partnership with the local health departments, state-level leadership thorough vision, and staff competency (see Appendix H).

3. Provide and Ensure Health Services, Including Assurance of a Competent Workforce The nationally established recommended functions suggest that a state public health department should ensure that health services are organized throughout the state (14); guarantee a minimum set of essential health services (15); connect people to health services and provide those services if they are not otherwise available (7); evaluate the effectiveness, accessibility, and quality of health services in the state (9); and assure a competent public health and personal health care workforce (8) to perform health services.

Why might some public health leaders disagree with these recommendations?

In general, my findings suggest that California's governmental public health leaders agreed that the new Department of Public Health should evaluate the quality and effectiveness of those services (9), assure a competent workforce (8), and to a lesser degree, ensure that health services are organized and available throughout the state (14). However, a relatively high percentage of California's governmental public health leaders disagreed with the recommendations that the new Department of Public Health should link people to needed personal health services and assure the provision of health care when otherwise unavailable (7) and guarantee a minimum set of essential health services (15).

Respondents' write-in comments suggest that some individuals may have disagreed with the appropriateness of CDPH's role in providing parts of these functions. Some individuals seemed to take issue with the suggestion that the new Department of Public Health should "assure the provision of health care when otherwise unavailable" (7) and "guarantee a minimum set of essential services" (15). Both of these recommendations have to do with providing health services, a role many indicated was more appropriate for the new Department of Health Care Services and not at all a function of public health. Still other individuals seemed to take issue with the recommendation that CDPH should connect people to services (7), a role some respondents seemed to interpret as more appropriate for local health departments. One respondent wrote that the state Public Health Department "[lacks] the knowledge of local health care resources and the ability to link individuals to them."

Why might some public health leaders perceive ineffective delivery of these functions?

Overall, California's governmental public health leaders seemed to perceive that the current state-level public health programs were relatively ineffective in providing and ensuring health services, especially in the assurance of a competent workforce. However, data suggests that state public health employees might be more likely than local public health employees to perceive the state's current efforts to link people to and assure health

services (7), and significantly more likely to perceive that the efforts to guarantee a minimum set of essential services (15) to be effective.

Respondents most commonly cited a lack of resources (both funding and staffing), the need for leadership (both through vision and action), and the need for partnerships, particularly with local public health departments, as the greatest barriers to the state's current performance. In addition to resources, leadership, and partnership needs, 35% of respondents indicated that relevant training was important for assuring the state's health workforce needs (8); and 34% indicated data accessibility was important for evaluating the effectiveness, accessibility, and quality of personal and population-based health services (9) (see Appendix F).

Respondents' length and place of employment also seemed to impact their perceptions of barriers in the state's ability to provide and ensure health services. Data suggest that state public health employees emphasized the importance of data issues as well as training and staff competency, while local public health employees had a tendency to focus on resource issues as well as the state's partnership with local health departments (see Appendix G). In addition, respondents with longer public health careers seemed to emphasize the importance of the state's partnership with local health departments, statelevel leadership through vision, staff competency, and program issues (accountability and efficiency), while respondents with shorter careers tended to emphasize the importance of the state's partnership with the local community (see Appendix H).

It seems that a respondent's perceptions of whether or not the new California Department of Public Health should provide these functions might impact his or her perceptions of the state's current effectiveness. For example, many respondents seemed to disagree with those functions that suggested the CDPH should provide health care services. Some of these respondents might have indicted that the state's current efforts were ineffective simply because they considered this function to be outside the realm of responsibility for the state's Department of Public Health. This might also explain why so many respondents emphasized the importance of the state's partnership with local health departments because they function as a linkage to health care services at the community level. Additionally, respondents' comments seemed to emphasize the importance of the state's partnership with the new California Department of Health Care Services, indicating that many of the functions relating to provision of health care services should fall to that department, rather than to the Department of Public Health.

4. Collaborate to Build Partnerships and Networks in California's Health System

A number of the 17 recommended functions touch on the interaction of state public health departments with partners, both within the state's public health system and in the broader community. Specifically, these suggest that a state public health department should clarify the authority, responsibility, and relationship between the various public health entities in the state (17); delegate power to localities and hold them accountable (13); support local health departments to ensure consistent capacity across the state (16); and mobilize community partnerships to identify and solve health problems (4).

Why might some public health leaders disagree with these recommendations?

A clear majority of California's governmental public health leaders agreed that CDPH should support local capacity (16) and mobilize community partnerships (4), and most also believe that the department should clarify the authority, responsibility, and relationship between the various public health entities in the state (17) and establish statewide health objectives and delegate power to localities and hold them accountable (13) (see Figure 5.1.). Not surprisingly, local public health employees were significantly more likely than state public health employees to agree that the state public health department should support local capacity (16) (see Appendix E).

Where there was disagreement with these recommended functions, respondents' comments seemed to suggest that these functions might blur the line between state and local health department responsibility, possibly justifying the emphasis placed on the importance of partnerships. For example, one respondent felt that the suggestion that the state would step in and compensate if local health departments could not fulfill their service obligations (16) might "topple the whole notion of State/County responsibilities for health care." Additionally, some respondents seemed to take issue with the recommendation to develop statewide health objectives (13), suggesting that this should be done by or in partnership with local health departments who might have a better understanding of the unique needs of the state's different regions and localities. A couple respondents indicated that it was important for the state to be involved in mobilizing partnerships at the community level (4), but that this should be done locally. Additionally, respondents' comments seemed to suggest that some believed that local health departments should have a role in determining the structure and relationship of the state's public health infrastructure (17)—that these clarifications should not be developed by the state public health department in a top-down approach without input from local public health departments.

Why might some public health leaders perceive ineffective delivery of these functions?

The majority of respondents perceived the state's current efforts to collaborate to build partnerships and networks in California's health system were ineffective. Additionally, respondents with public health careers spanning 20 or more years as well as those who indicated they were local health department employees seemed to have slightly more negative than average outlooks on the state's current effectiveness (see Appendix C and Appendix D). However, with one exception, these differences were not statistically significant. Data suggest that state public health employees were significantly more

33

likely to perceive the state's efforts to mobilize community partnerships as effective (see Appendix E).

Overall, respondents indicated that the greatest barriers to California's efforts to build partnerships and networks in the state's health system were sufficient funding and staffing, the state's partnership with local health departments and with the local community, and state-level leadership. Additionally, respondents seemed to perceive state-level program accountability as another fairly important obstacle for the state's progress in these functions (see Appendix F).

Interestingly, there were few significant differences in the perceptions of state and local public health employees regarding the barriers to the state's ability to perform these functions. Consistent with other functions, both local public health employees and respondents with longer public health careers tended to suggest that the state's partnership with local public health departments was a larger barrier than did state public health employees. Compared to state public health employees, local employees also emphasized the importance of state-level leadership through action, particularly for supporting local service capacity (16) and delineating the authority and responsibility of the state's public health careers, those who indicated they have worked in the field for 20 or more years were more significantly more likely to cite the importance of staff competency as well (see Appendix H).

Through their comments, respondents seemed to indicate that local public health departments played a role in the state's successful delivery of these functions. Accordingly, it was not surprising that, second only to resources, respondents emphasized the importance of partnerships in the state's ability to effectively perform these functions.

Chapter 6

FINDINGS & ANALYSIS

In summary, my survey suggests the following:

- California's governmental public health leaders agree with a majority of the recommended functions, but indicate the greatest disagreement with those functions that concern the new department's role as a provider and guarantor of health services and as a partner with communities. This disconnect may be attributed to the fact that these recommended functions were developed for the national public health system, a system which is not organized consistently from state-to state, and might better reflect the roles of state public health departments in smaller states. Respondents might have disagreed with these particular recommendations because they perceived that the function was more appropriately housed in other organizations or done in partnership with other organizations.
- 2) Respondents perceived that the state's current public health efforts were generally appropriate, but that performance could be more effective. Respondents seemed to indicate that the state's performance in tracking, identifying, researching, and communicating California's health needs was generally effective and that the state's efforts to establish and enforce statewide health policies were fairly effective. However, my data indicate that some respondents perceived the need for additional efforts to address the state's research capacity. A majority of respondents indicated a need for improvement in the state's current efforts to provide and ensure health services, including the assurance of a competent workforce, and in the state's efforts to collaborate to build partnerships and networks.

- 3) Across the board, respondents most frequently cited resources, leadership, and partnerships as barriers or challenges for the new department. While the ability to gain additional resources is dependent on efforts outside of the department's control, such as Legislative approval or state budgetary allocations, the role of the department's leadership and the nature of its partnerships might be more malleable. Interestingly, these problems were cited as reasons to create a new, separate Department of Public Health. Yet regardless of the reorganization, the state's governmental public health leaders still indicate that these issues are challenges more than any others. A review of literature found that the need for resources, leadership, and coordination of the state's public health programs are not new issues for California, possibly suggesting that the act of creating a new department will not itself solve these larger, on-going issues.
- 4) Many respondents seemed to recognize that both the new Department of Public Health and the new Department of Health Care Services would have to play an active role, and possibly a shared role, to ensure that health services are accessible and available. One disadvantage of housing the state's public health and medical services programs in separate departments is that this division of programs might make integration and coordination of the fields more challenging. Strong partnerships between the two new departments might help bridge the two fields and ensure that California is meeting all of the recommended public health functions, regardless of the department in which those responsibilities lie.
- 5) In general, state public health employees seemed to show stronger agreement with more of the recommended functions than did local public health employees, but both local public health employees and respondents with longer public health careers tended to emphasize the importance of the state's partnership with local

<u>health departments.</u> All of the self-identified state employees in my sample agreed with 11 out of the 17 recommended functions compared to the local employees who unanimously agreed with just 2 out of the 17. Local public health employees and those with longer public health careers might have been less likely to agree with the recommendations because they might perceive a stronger role or partnership between the new California Department of Public Health and local health departments in the delivery of these recommended functions.

Chapter 7

CONCLUSION & RECOMMENDATIONS

Expectations set for the new California Department of Public Health are high. According to remarks made by the Governor in his approval of the creation of a new Department of Public Health, the new department is supposed to increase public health leadership at the state level, create a more effective public health infrastructure, and increase accountability and effectiveness of the state's public health functions (California Office of the Governor, 2006). To date, the creation of a new California Department of Public Health has established a new administrative structure for those public health functions housed in the former Department of Health Services—a number of programs responsible for public health functions still remain outside the new Department of Public Health. Without additional resources, it is not clear exactly how the organizational change will result in the specific outcomes articulated by the Governor in his signing address.

The organizational structure of public health services varies from state to state and from locality to locality across the nation—in other words, to date, there seems to be no consensus on exactly how best to organize public health programs. In California, the state-level public health programs seem to have at times come together with the state's health care delivery systems (to foster integration, coordination, and efficiency) and at other times have moved apart (to encourage program effectiveness and accountability, and to develop leadership). In the last iteration of California's health department (DHS), the state's public health programs were co-housed with the state's health delivery programs (Medi-Cal) to address a lack of coordination, leadership, and cost-efficiency. Yet, these were some of the same problems used to justify the creation of a new Department of Public Health. Data from my survey suggest that the problems of public health's past are still present today. California's public health leaders indicated that a lack of resources—both in funding and staffing—is the greatest challenge for the new department, and that statelevel leadership as well as the department's partnership with local health departments and other groups in the local community are also significant barriers. Regardless of how the state's public health programs are organized, it seems that, at least in recent years, the same problems of lack of coordination, leadership, and cost-effectiveness persist. Perhaps, reorganization alone is not enough to improve the state's ability to deliver public health programs.

Regarding the perceived lack of resources, there is little the new department can do independently that it is not already doing to increase the amount of funding and staffing it receives. The department can partner with outside organizations to hire contract workers and can apply for grant funding, yet the Legislature must ultimately approve the department's budget requests as well as requests for additional staff positions. In today's tight fiscal climate, it seems unreasonable to expect that the new department will receive any significant amount of state funding beyond what it already requires.

However, there may be an opportunity for the new department to turn some of the other perceived obstacles—lack of leadership and the need for stronger partnerships into opportunities. Because California's public health programs are not consolidated under one department, there might be an opportunity for the leadership in the new Department of Public Health to articulate how those programs can best coordinate to ensure that California's public health needs are being met. This might potentially require the new department to analyze, both internally and externally, the gaps in the state's governmental public health system and begin conversations with other department leaders to devise plans of how to best meet California's needs. The new department leadership might explore how the various public health programs in the different departments coordinate to ensure that they are meeting California's public health needs; if there a need for a high-level coordinator of public health policy in the state; and how the new Department of Public Health might fill this role.

Additionally, this exploration could be extended to include other aspects of the state's public health system, particularly elements at the local level. The new department leadership might ask: How do the state-level public health programs connect with activities happening at the local level? What avenue is there for dialogue between the new Department of Public Health and the many private, non-profit, and philanthropic organizations that are in some way responsible for aspects of the state's public health system? Who exactly are these other organizations? Are they involved in joint planning discussions? How do they communicate with the state? How do best practices get disseminated from the local to the state?

Moving forward, it seems inevitable that the new department's leadership will want to conduct additional assessments to measure the impact of the organizational change on the effectiveness and efficiency of California's state-level public health programs. In light of the findings from this study, the department's leadership may want to consider the following three recommendations in future assessments of the state's public health programs.

First, in conducting future assessments, the department's leadership may want to consider including the some of the 17 recommended functions discussed in this study—particularly those that focus on specific state-level public health functions. Although an assessment using the State National Public Health Performance Standards (NPHPS) instrument would provide data comparable to some other states, it might also be helpful to include an assessment of recommendations specific to state-level public health departments. Because the NPHPS instrument is based on the 10 Essential Public Health Services, services that are recommended for all public health departments, an assessment only using the NPHPS performance standards might not completely reveal how well California's public health department is meeting the state's needs. My survey suggests that the majority of those surveyed agreed that the functions recommended by the Institute of Medicine were also appropriate for California's new Department of Public Health. As such, it might be helpful for future assessments to incorporate some of the state-specific recommendations formulated by the IOM in order to develop a more comprehensive picture of how California's state-level public health programs are performing.

Second, the department's leadership should consider exploring the scope of public health activities in the state, including identifying partners, defining responsibilities, and identifying gaps and overlaps in service delivery. My survey revealed that there were some functions that the new department will share, in part with other state agencies. A broader survey of the state's public health system might reveal additional overlaps. To improve efficiency and effectiveness of California's public health programs, and to leverage state funds to maximize impact, the new department leadership might want to assess the potential for forging collaborative partnerships with some of these entities.

Finally, in order to measure the long-term impact of the reorganization, the Department's leadership should consider conducting additional follow-up studies that measure how the perceptions of California's public health leaders change regarding the state's effectiveness in performing the 17 recommended functions. A longitudinal data set could more accurately determine whether or not the perceived problems of lack of resources, and the need for state-level public health leadership and stronger partnerships are the greatest barriers for the state's public health department. Additionally, longitudinal data might more accurately measure trends in differences of opinion and perception between state-level and local-level public health leaders. By identifying issues with the greatest disconnect in perceptions between state and local public health leaders, these data could inform collaborative efforts to strengthen the partnership between state and local health departments and ultimately, strengthen the state's governmental public health infrastructure.

APPENDIX A The 17 Recommended Functions

- 1. <u>Monitor:</u> Monitor health status to identify community health problems.
- 2. <u>Diagnose & Investigate:</u> Diagnose and investigate health problems and health hazards in the community.
- 3. <u>Communicate:</u> Inform, educate, and empower people about health issues.
- 4. <u>Partnerships:</u> Mobilize community partnerships to identify and solve health problems.
- 5. <u>Policies & Plans</u>: Develop policies and plans that support individual and community health efforts.
- 6. Enforce Laws: Enforce laws and regulations that protect health and ensure safety.
- 7. <u>Link & Assure:</u> Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
- 8. <u>Workforce:</u> Assure a competent public health and personal health care workforce.
- 9. <u>Evaluate:</u> Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
- 10. <u>Research:</u> Research for new insights and innovative solutions to health problems.
- 11. Assess Needs: Assess health needs in the state based on statewide data collection.
- 12. Statutory Base: Assure an adequate statutory base for health activities in the state.
- 13. <u>Health Objectives:</u> Establish statewide health objectives, delegating power to localities and holding them accountable.
- 14. <u>Essential Services</u>: Assure appropriate organized statewide effort to develop and maintain essential personal, educational, and environmental health services.
- 15. Guarantee Minimum: Guarantee a minimum set of essential health services.
- 16. <u>Support Local Capacity</u>: Support of local service capacity, especially when disparities in local ability to raise revenue and/or administer programs require subsidies, technical assistance, or direct action by the state to achieve adequate service levels.
- 17. <u>Delineate Authority:</u> Clearly delineate the basic authority and responsibility entrusted to public health agencies, boards, and officials at the state and local levels and the relationships between them.

A Note: Recommended functions 1-10 represent the 10 Essential Services and recommended functions 11-17 represent the Institute of Medicine's recommended state-level responsibilities.

APPENDIX B Comparison of Mean and Standard Deviation Scores for the 17 Recommended Functions

Should CDPH Provide This Service/Perform This Duty?	Mean	Standard Deviation		Mean	Standard Deviation
1: Monitor	3.91	0.294	1: Monitor	2.79	0.599
2: Diagnose & Investigate	3.68	0.621	2: Diagnose & Investigate	2.90	0.379
3: Communicate	3.78	0.495	3: Communicate	2.78	0.510
4: Partnerships	3.59	0.645	4: Partnerships	2.55	0.587
5: Policies & Plans	3.59	0.693	5: Policies & Plans	2.57	0.530
6: Enforce Laws	3.81	0.463	6: Enforce Laws	2.89	0.475
7: Link & Assure	2.75	1.020	7: Link & Assure	2.21	0.653
8: Workforce	3.58	0.581	8: Workforce	2.07	0.640
9: Evaluate	3.61	0.521	9: Evaluate	2.21	0.624
10: Research	3.43	0.802	10: Research	2.22	0.599
11: Assess Needs	3.86	0.352	11: Assess Needs	2.67	0.557
12: Statutory Base	3.67	0.557	12: Statutory Base	2.61	0.710
13: Health Objectives	3.07	0.954	13: Health Objectives	2.15	0.684
14: Essential Services	3.47	0.684	14: Essential Services	2.46	0.579
15: Guarantee Minimum	3.05	0.918	15: Guarantee Minimum	2.20	0.790
16: Support Local Capacity	3.47	0.684	16: Support Local Capacity	2.04	0.740
17: Delineate Authority	3.36	0.912	17: Delineate Authority	2.41	0.537

Mean scores were coded as follows for the	Mean scores were coded as follows for the
"Should" questions:	"Effective" questions:
1 = Completely Disagree	1 = Completely Ineffective
2 = Somewhat Disagree	2 = Somewhat Ineffective
3 = Somewhat Agree	3 = Somewhat Effective
4 = Completely Agree	4 = Completely Effective

APPENDIX C

Respondent Agreement with Recommended Functions and Perceived Effectiveness of Current State-Level Public Health Programs by State or Local Employment

Recommended Fun	ctions	Agree	Effective
	% State	100	84.6
1: Monitor	% Local	100	82.9
	% Total	100	80
	% State	100	92.9
2: Diagnose & Investigate	% Local	94.5	86.5
	% Total	94.1	90.4
	% State	93.7	75
3: Communicate	% Local	95.2	76.2
	% Total	96.4	76.4
	% State	100	73.3
4: Partnerships	% Local	92.5	45
	% Total	94.4	56.1
	% State	100	60
5: Policies & Plans	% Local	89.7	53.8
	% Total	91.3	58.7
	% State	100	69.2
6: Enforce Laws	% Local	95.3	86
	% Total	84.1	82.8
	% State	69.2	46.2
7: Link & Assure	% Local	64.9	27
	% Total	62.3	33.9
	% State	100	13.3
8: Workforce	% Local	97.3	24.3
	% Total	95.5	20.3
	% State	100	30.8
9: Evaluate	% Local	97.4	28.9
	% Total	98.5	32.1
	% State	100	35.7
10: Research	% Local	88.2	29.4
	% Total	89.6	30.9

Continued, next page

Recommended Fund	Agree	Effective			
	% State	100	86.7		
11: Assess Needs	% Local	100	67.5		
	% Total	100	68.6		
	% State	100	45.5		
12: Statutory Base	% Local	97.3	64.9		
	% Total	95.8	61.3		
	% State	85.7	35.7		
13: Health Objectives	% Local	78.4	29.7		
	% Total	75	31.5		
	% State	100	53.8		
14: Essential Services	% Local	97.2	47.2		
	% Total	93	50		
	% State	81.8	72.7		
15: Guarantee Minimum	% Local	74.3	31.4		
	% Total	71.2	38.8		
	% State	81.8	45.5		
16: Support Local Capacity	% Local	97.4	23.1		
	% Total	93	28.8		
	% State	83.3	41.7		
17: Delineate Authority	% Local	86.5	43.2		
	% Total	84.5	48.3		

APPENDIX C, continued

Appendix D

Respondent Agreement with Recommended Functions and Perceived Effectiveness of Current State-Level Public Health Programs by Length of Public Health Career

Recommended Fur	nctions	Agree	Effective
	% 0-19 years	100	84.4
1: Monitor	% 20+ years	100	81.8
	% Total	100	80
	% 0-19 years	94.7	93.3
2: Diagnose & Investigate	% 20+ years	90.9	81
	% Total	94.1	90.4
	% 0-19 years	97.3	86.5
3: Communicate	% 20+ years	90.9	59.1
	% Total	96.4	76.4
	% 0-19 years	97.3	60.6
4: Partnerships	% 20+ years	90.9	40.9
	% Total	94.4	56.1
	% 0-19 years	86.1	62.5
5: Policies & Plans	% 20+ years	95.5	45.5
	% Total	91.3	58.7
	% 0-19 years	94.7	80.6
6: Enforce Laws	% 20+ years	100	85
	% Total	84.1	82.2
	% 0-19 years	76.3	35.5
7: Link & Assure	% 20+ years	36.4	26.3
	% Total	62.3	33.9
	% 0-19 years	94.7	21.9
8: Workforce	% 20+ years	95.2	20
	% Total	95.5	20.3
	% 0-19 years	94.7	37.9
9: Evaluate	% 20+ years	100	18.2
	% Total	98.5	32.1
	% 0-19 years	89.5	30
10: Research	% 20+ years	86.4	33.3
	% Total	89.6	30.9

Continued, next page

APPENDIX D, continued

Recommended Func	tions	Agree	Effective
	% 0-19 years	100	81.8
11: Assess Needs	% 20+ years	100	59.1
	% Total	100	68.6
	% 0-19 years	93.9	64.3
12: Statutory Base	% 20+ years	95.5	55
	% Total	95.8	61.3
	% 0-19 years	69.4	38.7
13: Health Objectives	% 20+ years	81	20
	% Total	75	31.5
	% 0-19 years	94.6	61.3
14: Essential Services	% 20+ years	90	31.6
	% Total	93	50
	% 0-19 years	72.2	50
15: Guarantee Minimum	% 20+ years	66.7	22.2
	% Total	71.2	38.8
	% 0-19 years	97.1	32.3
16: Support Local Capacity	% 20+ years	85.7	20
	% Total	93	28.8
	% 0-19 years	88.6	48.4
17: Delineate Authority	% 20+ years	77.3	33.3
	% Total	84.5	48.3

Appendix E

Significance of Respondent Agreement with Recommended Functions and Perceived Effectiveness of Current State-Level Public Health Programs

		State an	d Local		Length of Career							
	"Sho	ould"	"Effe	ective	"Sho	ould"	"Effe	ective				
	Pierson Chi- Square	Asymp. Sig. (2-sided)	Pierson Chi- Square	Asymp. Sig. (2-sided)	Pierson Chi- Square	Asymp. Sig. (2-sided)	Pierson Chi- Square	Asymp. Sig. (2-sided)				
1: Monitor	N/A	N/A	0.02	0.887	N/A	N/A	0.061	0.804				
2: Diagnose & Investigate	1.694	0.193	0.397	0.529	0.328	0.567	1.824	0.177				
3: Communicate	0.031	0.859	0.02	0.889	1.167	0.280	5.721	0.017**				
4: Partnerships	1.27	0.258	3.513	0.061*	1.167	0.280	2.055	0.152				
5: Policies & Plans	2.77	0.096*	0.166	0.684	1.285	0.257	1.534	0.215				
6: Enforce Laws	0.770	0.380	1.924	0.165	1.144	0.285	0.173	0.677				
7: Link & Assure	0.799	0.371	1.617	0.203	9.408	0.002***	0.455	0.500				
8: Workforce	1.27	0.258	0.773	0.379	0.007	0.933	0.026	0.872				
9: Evaluate	0.402	0.526	0.015	0.901	0.589	0.443	2.35	0.125				
10: Research	3.133	0.077*	0.183	0.669	0.131	0.718	0.058	0.809				
11: Assess Needs	N/A	N/A	2.02	0.155	N/A	N/A	3.438	0.064*				
12: Statutory Base	0.059	0.808	1.334	0.248	0.059	0.808	0.421	0.517				
13: Health Objectives	0.657	0.418	0.169	0.681	0.096	0.341	1.977	0.160				
14: Essential Services	1.401	0.237	0.397	0.529	0.42	0.517	4.16	0.041**				
15: Guarantee Minimum	0.002	0.965	6.555	0.010***	0.196	0.658	3.63	0.057*				
16: Support Local Capacity	5.106	0.024**	2.283	0.131	2.585	0.108	0.917	0.338				
17: Delineate Authority	0.092	0.761	0.009	0.924	1.297	0.255	1.054	0.305				

Note: * indicates statistical significance at the .10 level;

** indicates statistical significance at the .05 level;

***indicates statistical significance at the .01 level.

Appendix F
Perceived Barriers to the 17 Recommended Functions by Percentage of
Total Respondents

% of Total Respondents Who Perceive These As Barriers to CDPH's Ability to Provide/Perform the 17 Recommended Functions	1: Monitor	2: Diagnose & Investigate	3: Communicate	4: Partnership	5: Policies & Plans	6: Enforce Laws	7: Link & Assure	8: Workforce	9: Evaluate	10: Research	11: Assess Needs	12: Statutory Base	13: Health Objectives	14: Essential Services	15: Guarantee Minimum	16: Support Local Capacity	17: Delineate Authority
Sufficient Funding	67	71	61	45	44	52	41	60	49	59	57	24	39	46	46	51	24
Sufficient Staffing	55	62	46	44	39	53	33	45	40	52	45	28	32	37	29	38	21
Partnership With Local Health Department	48	46	49	60	47	40	40	37	34	34	38	22	48	29	32	39	39
Partnership With Local Community	26	31	35	49	35	21	39	24	25	27	11	8	32	25	24	28	19
State-level Leadership Through Action	29	33	39	37	47	29	29	46	27	46	26	44	31	32	27	35	34
State-level Leadership Through Vision	34	25	38	44	49	18	22	42	28	52	28	38	35	34	26	24	29
Data Accessibility	40	32	11	14	13	14	11	5	34	22	52	8	19	4	8	4	4
Data Relevancy	19	15	9	9	9	6	5	4	26	20	42	11	8	5	6	4	2
Data Uniformity	42	26	11	9	7	12	8	4	27	18	53	9	14	5	9	4	6
State-level Program Accountability	18	14	18	24	21	25	19	24	28	22	19	19	26	18	18	19	20
State-level Program Efficiency	24	25	26	21	29	29	22	19	26	20	20	13	19	13	18	18	12
Relevant Technical Assistance	12	19	19	19	15	12	9	15	26	27	21	5	21	12	13	15	12
Relevant Training	17	17	17	18	17	19	12	35	29	33	17	8	15	12	12	15	8
Staff Competency	13	17	24	17	26	22	11	25	27	27	27	13	21	15	14	17	9
Laboratory Capacity	17	28	2	1	1	12	4	12	9	13	17	2	5	5	7	6	2
Other	8	7	5	9	8	8	18	12	7	9	11	12	14	12	14	9	12

Appendix G Perceived Barriers to the 17 Recommended Functions by Percentage of State and Local Respondents

1											<u> </u>							1
17: Delineate Authority	Local	33	26	63	23	56	49	10	0	7	30	14	21	12	12	0	14	
	State	35	41	35*	35	29*	24*	12	12**	12	24	24	9	12	18	12**	24	
16: Support Local Capacity	Iscal	11	54	61	4	58	37	w	ŝ	7	33	26	26	23	26	٢	6	
visone') loso I tronging .at	State	59	53	41	29	29**	24	9	9	12	12	24	12	18	18	12	24	
	Lacal	65	4	49	33	40	37	6	ŝ	12	21	26	19	14	16	ŝ	21	1
muminiM 93tarantee Minimum	State	65	35	35	35	35	35	18	18	18	35	24	18	54	29	24**	18	
14: Essential Services	Lacal	63	51	42	35	47	47	7	ŝ	S	23	12	16	12	14	ŝ	14	
sooimo S loitnoss A tht	State	71	53	41	35	41	53	12	12	12	29	35	18	29*	35	12	24	
13: Health Objectives	Local	54	40	67	40	40	4	21	12	19	33	28	30	21	28	S	19	
sovitabidO dilooH .Et	State	53	53	65	53	41	59	29	9	18	35	18	24	24	24	9	24	
12: Statutory Base	Local	30	33	37	12	56	40	9	12	14	26	16	9	14	14	0	12	
esed weatured? . Ct	State	41	41	12*	12	47	53	12	18	12	18	12	0	9	18	9	29*	
	Local	33	51	56	12	28	30	58	49	61	16	23	23	21	26	12	6	
sb99N ss928A :11	State	41	47	18***	18	35	35	59	41	59	29	18	29	24	29	29*	24	
	Lacal	65	65	40	28	42	49	21	16	16	19	23	30	42	37	14	12	
10: Kesearch	State	11	59	35	29	53	11	18	29	12	24	29	29	29	29	18	18	
	Lacal	63	54	64	35	9	8	37	33	6	33	30	78	30	28	6	6	-
9: Evaluate	State	65	47	29	24	24	29	59	35	24	4	35	35	53*	41	18	12	
	[k20.J	72	58	56	33	56	56	17	7	7	26	23	19	40	23	14	14	
8: Workforce	State	11	53	35	29	65	41	12	0	0	29	29	18	59	41	24	18	
	Lacal	61	49	54	49	4	35	w	61	N.	53	37	6	s	~	٢	21	
9711 String & Assure	State	35*	24**	47	47	29	18	29***	12	24*	24	12*	18	41***	24**	0	29	
	Lacal	63	63	58	23	33	19	14	6	9	28	35	14	14	21	w	12	
6: Епforce Laws	State	65	77	35	35	41	24	24	18**	18	29	35	12	41**	35	35***	12	
	Local	28	54	65	49	54	61	16	19 1	12	58	35	53	21 4	37	3	6	-
5: Policies & Plans	State	23	53	41*	47 4	59	65	54	0*	9	12	50	12	8	18	0	12	
	Local	69	28	77 4	28	47	49	19	12	14	58	30	21	26	26	7	6	
4: Partnership	State	53	47	59	65	47	59	9	0	9	24	24	24	12	6*	0	24	
	Lacal	67	54	65	42	64	49	13	6	14	19	21	16	14	53	1	6	level; level;
3: Communicate	State	88	59	47	41	53	35	12	12	9	12	35	29	35*	35	9	0	05 0
	Lacal	70	61	49	37	37	21	23	12	19	4	28	21	16	14	21	12	the
2: Diagnose & Investigate	State	82	65	35	18	29	18	41	18	24	35***	12	12	12	24	35	0	8 8
	Lacal	61	54	52	30	23	30	5	23	64	14	28	~	~	6	19	6	nifice nifica
1: Monitor	State	88**	65	24**	6**	35	29	24	9	41	29	18	12	29**	18	18	12	al sign al sign
% of State and Local % of State and Local Respondents Who Perceive These As Barriers to CDPH's Ability to Provide/ Perform the T7 Recommeded Finntrions		Sufficient Funding	Sufficient Staffing	Partnership with Local Health Department	Partnership with Local Community	State-level Leadership through Action	State-level Leadership through Vision	Data Accessibility	Data Relevancy	Data Uniformity	State-level Program Accountability	State-level Program Efficiency	Relevant Technical Assistance	Relevant Training	Staff Competency	Laboratory Capacity	Other	Note: * indicates statistical significan ** indicates statistical significan

Appendix H Perceived Barriers to the 17 Recommended Functions by Length of Respondent's Public Health Career

	,81Y +02%	46	41	50	18	55	55	20	2	6	36	14	23	18	23	N.	27]
17: Delineate Authority	.81Y 01-0%	26 4	24 4	58 5	32 1	45 5	34 5	5	33	8	24 3	18 1	13 2	8 1	8	33	11*	
	.sı¥+02%	77	5	89	41	89	36	w	ŝ	2	32	36	23	27	41	14	23	1
16: Support Local Capacity	.81Y 91-0%	89	47	47	40	40**	32	s	5	5	24	18	21	18	13**	2	~	
	.sı¥ +02%	73	41	55	46	41	46	6	14	23	32	23	27	18	32	6	27	1
muminiM 991nsrang. 31	.81Y 91-0%	61	42	6	26	37	32	13	5	×	21	26	13	16	13*	П	16	
CODE 100 10000000 111	.srY+02%	68	50	46	27	64	55	w	ŝ	9	32	23	14	23	27	14	27	
14: Essential Services	.81Y 91-0%	63	53	40	40	34**	45	5	~	5	21	16	18	13	18	3*	11^{*}	
samalao muan .ci	.erY +02%	59	41	82	50	50	59	6	6	18	41	32	27	27	46	0	27]
13: Health Objectives	.81Y 91-0%	50	45	58*	40	34	42	32**	Ξ	18	29	21	29	18	16**	œ	16	
arma (rannung izz	.srY+02%	46	46	41	6	73	46	6	9	14	27	18	14	23	23	0	23	
12: Statutory Base	.81Y 91-0%	26	29	24	13	42**	42	=	16	13	21	13	3*	5**	Ξ	3	13	
CDAALT COOCCT ! ! ! !	.srY +02%	89	59	50	14	27	32	59	55	68	14	32	18	18	41	14	18	
sb99N ss928A :11	.81Y 91-0%	63	45	42	13	32	32	58	42	55	24	16	29	24	18*	18	11	
10: Research	.erY+02%	64	73	41	27	46	64	27	23	18	23	27	27	46	41	6	18	
I GUP	.81Y 91-0%	68	58	37	29	45	50	16	18	13	18	24	32	34	32	18	11	
9: Evaluate	.srY +02%	29	59	50	32	32	46	50	46	36	* 55	, 46	23	36	36	18	14	
	.81Y 91-0%	63	47	40	32	37	32	40	26	34	24**	24*	34	37	29	~	∞	
8: Workforce	.srY +02%	29	55	55	23	-29	73	e a	0	S	27	27	33	46	* 50	14	. 27	
JI IX U	.81Y 91-0%	79	58	47	37	55	40**	5	3	0	26	24	16	45	16***	18	8**	
7: Link & Assure	.erY +02%	50	50	59	32	36	36	18	ŝ	14	32	32	S	14	14	0	32	
	.81Y 91-0%	55	37	47	58*	5	26	~	5	~	18	29	16	16	=	~	18	
6: Enforce Laws	.s1Y+02%	64	68	64	18	32	23	23	6	18	32	41	18	23	36	23	14	
	.srY 91-0%	63	99	45	32	37	18	13	5	~	26	32	=	21	18	8	11	4
5: Policies & Plans	,sı¥ +02%	* 73	5	* 73	55	68	* 77	6	14	14	32	32	53	18	** 55	0	N)	
	.81Y 91-0%	47*	47	50*	45	47	53*	24	13	~	18	34	18	21	18***	33	13	
4: Partnership	.srY +02%	50	59	82	68	55	64	N N	6	14	32	36	18	18	* 46	0	14	
	.81Y 91-0%	50	53	99	55	42	45	21*	~	11	24	24	24	24	5***	3	13	
3: Communicate	.erY +02%	29	41	4	* 2	55	22	6	6	S	23	27	14	14	41	0	w	level; level; level.
	.81Y 91-0%	79	63**	50**	29***	37	40	13	Π	16	13	24	24	24	18**	5	~	the .10 level; the .05 level; the .01 level.
angua in a acargu a ta	.erY+02%	68	59	73	36	46	32	23	14	27	23	36	27	14	27	27	6	the the
2: Diagnose & Investigate	.81Y 91-0%	76	63	29***	29	29	13**	32	13	16	=	16	13	16	=	24	×	atat
	.srY +02%	72	50	59	27	32	36	41	18	50	18	27	18	14	14	14	6	fican fican
1: Monitor	.81Y 91-0%	99	61	37	21	24	26	34	18	34	18	24	ŝ	13	=	21	11	signi signi
% Respondents by Length of Career Who Perceive These As Barriers to CDPH's Ability to Provide/Perform the 17 Recommended Functions		Sufficient Funding	Sufficient Staffing	Partnership with Local Health Department	Partnership with Local Community	State-level Leadership through Action	State-level Leadership through Vision	Data Accessibility	Data Relevancy	Data Uniformity	State-level Program Accountability	State-level Program Efficiency	Relevant Technical Assistance	Relevant Training	Staff Competency	Laboratory Capacity	Other	Note: * indicates statistical significance ** indicates statistical significance ****indicates statistical significance

APPENDIX I Survey To California's Governmental Public Health Leaders

NOTE

Over 200 individuals were solicited for their participation in this survey. The data below reflects the actual responses of 85 individuals who participated in this survey. However, not every individual answered every question. In some instances, this data may be slightly different from data presented in the report, which was calculated to exclude missing or "don't know" responses.

INTRODUCTION

This survey is designed to measure how well California's state-level public health programs compare to national standards for public health services and duties.

SECTION 1: ESSENTIAL PUBLIC HEALTH SERVICES

The U.S. Public Health Service agency, in collaboration with national public health organizations, identified 10 Essential Services of Public Health. These 10 services describe the public health activities that should be undertaken in all communities. This section will include a series of questions relating to the 10 Essential Public Health Services.

Essential Service 1: Monitor Health Status to Identify Health Problems

1. Should the future California Department of Public Health provide this service?

90.6%	Completely agree
9.4%	Somewhat agree
0%	Somewhat disagree
0%	Completely disagree
0%	Don't know

2. How effectively do California's current state-level public health programs provide this service?

3.5%	Completely effective
67.1%	Somewhat effective
12.9%	Somewhat ineffective
4.7%	Completely ineffective
11.8%	Don't know

3. In your opinion, what factors are barriers or challenges to the state's ability to provide this service?

67.1%	Sufficient funding levels
55.3%	Sufficient staffing levels
48.2%	State partnership with local public health department
42.4%	Data uniformity
40%	Data accessibility
34.1%	State-level leadership though vision
29.4%	State-level leadership through action
25.9%	State partnership with local community
23.5%	State-level program efficiency
18.8%	Data relevancy
17.6%	State-level program accountability
16.5%	Laboratory capacity
16.5%	Relevant training
12.9%	Staff competency
11.8%	Relevant technical assistance
8.2%	Other

Essential Service 2: Diagnose and Investigate Health Problems and Health Hazards

1. Should the future California Department of Public Health provide this service?

75.3%	Completely agree
18.8%	Somewhat agree
4.7%	Somewhat disagree
1.2%	Completely disagree
0%	Don't know

2. How effectively do California's current state-level public health programs provide this service?

1.2%	Completely effective
76.5%	Somewhat effective
7.1%	Somewhat ineffective
1.2%	Completely ineffective
14.1%	Don't know

3. In your opinion, what factors are barriers or challenges to the state's ability to provide this service?

70.6%	Sufficient funding levels
62.4%	Sufficient staffing levels
45.9%	State partnership with local public health department

- 32.9% State-level leadership through action
- 31.8% Data accessibility
- 30.6% State partnership with local community
- 28.2% Laboratory capacity
- 25.9% Data uniformity
- 24.7% State-level leadership though vision
- 24.7% State-level program efficiency
- 18.8% Relevant technical assistance
- 16.5% Relevant training
- 16.5% Staff competency
- 15.3% Data relevancy
- 14.1% State-level program accountability
- 7.1% Other

Essential Service 3: Inform, Educate, and Empower People about Health Issues

1. Should the future California Department of Public Health provide this service?

80%	Completely agree
14.1%	Somewhat agree
3.5%	Somewhat disagree
0%	Completely disagree
0%	Don't know

2. How effectively do California's current state-level public health programs provide this service?

2.4%	Completely effective
62.4%	Somewhat effective
18.8%	Somewhat ineffective
1.2%	Completely ineffective
0%	Don't know

3. In your opinion, what factors are barriers or challenges to the state's ability to provide this service?

61.2% Sufficient funding le	evels
-----------------------------	-------

- 49.4% State partnership with local public health department
- 45.9% Sufficient staffing levels
- 38.8% State-level leadership through action
- 37.6% State-level leadership though vision
- 35.3% State partnership with local community
- 25.9% State-level program efficiency
- 23.5% Staff competency
- 18.8% Relevant technical assistance

- 17.6% State-level program accountability
- 16.5% Relevant training
- 10.6% Data uniformity
- 10.6% Data accessibility
- 9.4% Data relevancy
- 4.7% Other
- 2.4% Laboratory capacity

Essential Service 4: Mobilize Partnerships to Identify and Solve Health Problems

1. Should the future California Department of Public Health provide this service?

55.3%	Completely agree
23.5%	Somewhat agree
3.5%	Somewhat disagree
1.2%	Completely disagree
1.2%	Don't know

2. How effectively do California's current state-level public health programs provide this service?

1.2%	Completely effective
42.4%	Somewhat effective
31.8%	Somewhat ineffective
2.4%	Completely ineffective
7.1%	Don't know

3. In your opinion, what factors are barriers or challenges to the state's ability to provide this service?

60%	State partnership with local public health department
49.4%	State partnership with local community
44.7%	Sufficient funding levels
43.5%	Sufficient staffing levels
43.5%	State-level leadership though vision
36.5%	State-level leadership through action
23.5%	State-level program accountability
21.2%	State-level program efficiency
18.8%	Relevant technical assistance
17.6%	Relevant training
16.5%	Staff competency
14.1%	Data accessibility

- 9.4% Data uniformity
- 9.4% Data relevancy
- 9.4% Other

1.2% Laboratory capacity

Essential Service 5: Develop Policies and Plans that Support Individual and Statewide Health Efforts

1. Should the future California Department of Public Health provide this service?

56.5%	Completely agree
17.6%	Somewhat agree
5.9%	Somewhat disagree
1.2%	Completely disagree
12.9%	Don't know

2. How effectively do California's current state-level public health programs provide this service?

0%	Completely effective
43.5%	Somewhat effective
29.4%	Somewhat ineffective
1.2%	Completely ineffective
9.4%	Don't know

- 3. In your opinion, what factors are barriers or challenges to the state's ability to provide this service? 49.4% State-level leadership though vision
 - 47.1% State partnership with local public health department
 - 47.1% State-level leadership through action
 - 43.5% Sufficient funding levels
 - 38.8% Sufficient staffing levels
 - 35.3% State partnership with local community
 - 29.4% State-level program efficiency
 - 25.9% Staff competency
 - 21.2% State-level program accountability
 - 16.5% Relevant training
 - 15.3% Relevant technical assistance
 - 12.9% Data accessibility
 - 9.4% Data relevancy
 - 8.2% Other
 - 7.1% Data uniformity
 - 1.2% Laboratory capacity

Essential Service 6: Enforce Laws and Regulations that Protect Health and Ensure Safety

1. Should the future California Department of Public Health provide this service?

68.2%	Completely agree
10.6%	Somewhat agree
2.4%	Somewhat disagree
0%	Completely disagree
0%	Don't know

2. How effectively do California's current state-level public health programs provide this service?

4.7%	Completely effective
57.6%	Somewhat effective
12.9%	Somewhat ineffective
0%	Completely ineffective
7.1%	Don't know

3. In your opinion, what factors are barriers or challenges to the state's ability to provide this service?

52.9%	Sufficient staffing levels
51.8%	Sufficient funding levels
40%	State partnership with local public health department
29.4%	State-level leadership through action
29.4%	State-level program efficiency
24.7%	State-level program accountability
22.4%	Staff competency
21.2%	State partnership with local community
18.8%	Relevant training
17.6%	State-level leadership though vision
14.1%	Data accessibility
11.8%	Data uniformity
11.8%	Laboratory capacity
11.8%	Relevant technical assistance
8.2%	Other
5.9%	Data relevancy

Essential Service 7: Link People to Needed Personal Health Services and Assure the Provision of Health Care when Otherwise Unavailable

1. Should the future California Department of Public Health provide this service?

22.4% Completely agree

- 18.8% Somewhat disagree
- 11.8% Completely disagree
- 0% Don't know
- 2. How effectively do California's current state-level public health programs provide this service?

0%	Completely effective
22.4%	Somewhat effective
35.3%	Somewhat ineffective
8.2%	Completely ineffective
14.1%	Don't know

3. In your opinion, what factors are barriers or challenges to the state's ability to provide this service?

41.2%	Sufficient funding levels
40%	State partnership with local public health department
38.8%	State partnership with local community
32.9%	Sufficient staffing levels
29.4%	State-level leadership through action
22.4%	State-level leadership though vision
22.4%	State-level program efficiency
18.8%	State-level program accountability
17.6%	Other
11.8%	Relevant training
10.6%	Data accessibility
10.6%	Staff competency
9.4%	Relevant technical assistance
8.2%	Data uniformity
4.7%	Data relevancy
3.5%	Laboratory capacity

Essential Service 8: Assure a Competent Public and Personal Health Care Workforce

1. Should the future California Department of Public Health provide this service?

49.4%	Completely agree
25.9%	Somewhat agree
3.5%	Somewhat disagree
0%	Completely disagree
1.2%	Don't know

2. How effectively do California's current state-level public health programs provide this service?

1.2%	Completely effective
12.9%	Somewhat effective
44.7%	Somewhat ineffective
10.6%	Completely ineffective
9.4%	Don't know

3. In your opinion, what factors are barriers or challenges to the state's ability to provide this service?

department

60%	Sufficient funding levels
45.9%	State-level leadership through action
44.7%	Sufficient staffing levels
42.4%	State-level leadership though vision
36.5%	State partnership with local public health
35.3%	Relevant training
24.7%	Staff competency
23.5%	State partnership with local community
23.5%	State-level program accountability
18.8%	State-level program efficiency
15.3%	Relevant technical assistance
11.8%	Laboratory capacity
11.8%	Other
4.7%	Data accessibility
3.5%	Data uniformity
3.5%	Data relevancy

Essential Service 9: Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-Based Health Services

1. Should the future California Department of Public Health provide this service?

49.4%	Completely agree
28.2%	Somewhat agree
1.2%	Somewhat disagree
0%	Completely disagree
0%	Don't know

2. How effectively do California's current state-level public health programs provide this service?

0%	Completely effective	
21.2%	Somewhat effective	

21.2% Somewhat effective

- 37.6% Somewhat ineffective
- 7.1% Completely ineffective
- 14.1% Don't know
- 3. In your opinion, what factors are barriers or challenges to the state's ability to provide this service?

49.4%	Sufficient funding	levels
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- 40% Sufficient staffing levels
- 34.1% State partnership with local public health department
- 34.1% Data accessibility
- 29.4% Relevant training
- 28.2% State-level leadership though vision
- 28.2% State-level program accountability
- 27.1% Data uniformity
- 27.1% State-level leadership through action
- 27.1% Staff competency
- 25.9% State-level program efficiency
- 25.9% Data relevancy
- 25.9% Relevant technical assistance
- 24.7% State partnership with local community
- 9.4% Laboratory capacity
- 7.1% Other

Essential Service 10: Research for New Insights and Innovative Solutions to Health Problems

1. Should the future California Department of Public Health provide this service?

45.9%	Completely agree
24.7%	Somewhat agree
4.7%	Somewhat disagree
3.5%	Completely disagree
0%	Don't know

2. How effectively do California's current state-level public health programs provide this service?

0%	Completely effective
20%	Somewhat effective
38.8%	Somewhat ineffective
5.9%	Completely ineffective
14.1%	Don't know

3. In your opinion, what factors are barriers or challenges to the state's ability to provide this service?

58.8%	Sufficient funding levels
51.8%	Sufficient staffing levels
51.8%	State-level leadership though vision
45.9%	State-level leadership through action
34.1%	State partnership with local public health department
32.9%	Relevant training
27.1%	State partnership with local community
27.1%	Staff competency
27.1%	Relevant technical assistance
22.4%	Data accessibility
22.4%	State-level program accountability
20%	State-level program efficiency
20%	Data relevancy
17.6%	Data uniformity
12.9%	Laboratory capacity
9.4%	Other

SECTION 2: STATE-LEVEL PUBLIC HEALTH DUTIES

The Institute of Medicine has developed a unique set of recommendations regarding public health roles and responsibilities for each level of government—federal, state, and local. This section will include a series of questions relating to the Institute of Medicine's recommendations for state-level public health duties.

State Responsibility 1: Assess health needs in the state based on statewide data collection

1. Should the future California Department of Public Health be responsible for this duty?

77.6%	Completely agree
12.9%	Somewhat agree
0%	Somewhat disagree
0%	Completely disagree
0%	Don't know

2. How effectively do California's current public health programs perform this duty?

1.2%	Completely effective
55.3%	Somewhat effective
23.5%	Somewhat ineffective
2.4%	Completely ineffective
8.2%	Don't know

3. In your opinion, what factors are barriers or challenges to the state's ability to perform this duty?

56.5%	Sufficient funding levels
52.9%	Data uniformity
51.8%	Data accessibility
44.7%	Sufficient staffing levels
42.4%	Data relevancy
37.6%	State partnership with local public health department
28.2%	State-level leadership though vision
27.1%	Staff competency
25.9%	State-level leadership through action
21.2%	Relevant technical assistance
20%	State-level program efficiency
18.8%	State-level program accountability
16.5%	Laboratory capacity
16.5%	Relevant training
10.6%	State partnership with local community
10.6%	Other

State Responsibility 2: Assure an adequate statutory base for health activities in the state

1. Should the future California Department of Public Health be responsible for this duty?

60%	Completely agree
21.2%	Somewhat agree
3.5%	Somewhat disagree
0%	Completely disagree
4.7%	Don't know

2. How effectively do California's current public health programs perform this duty?

Completely effective
Somewhat effective
Somewhat ineffective
Completely ineffective
Don't know

3. In your opinion, what factors are barriers or challenges to the state's ability to perform this duty?

43.5%	State-level leadership through action
37.6%	State-level leadership though vision
28.2%	Sufficient staffing levels
22 50/	Cuff signt funding laugh

23.5% Sufficient funding levels

- 22.4% State partnership with local public health department
- 18.8% State-level program accountability
- 12.9% State-level program efficiency
- 12.9% Staff competency
- 11.8% Other
- 10.6% Data relevancy
- 9.4% Data uniformity
- 8.2% Data accessibility
- 8.2% State partnership with local community
- 8.2% Relevant training
- 4.7% Relevant technical assistance
- 2.4% Laboratory capacity

State Responsibility 3: Establish statewide health objectives, delegating power to localities and holding them accountable

1. Should the future California Department of Public Health be responsible for this duty?

28.2%	Completely agree
24.7%	Somewhat agree
11.8%	Somewhat disagree
5.9%	Completely disagree
3.5%	Don't know

2. How effectively do California's current public health programs perform this duty?

0%	Completely effective
20%	Somewhat effective
32.9%	Somewhat ineffective
10.6%	Completely ineffective
11.7%	Don't know

- 3. In your opinion, what factors are barriers or challenges to the state's ability to perform this duty?
 - 48.2% State partnership with local public health department
 - 38.8% Sufficient funding levels
 - 35.3% State-level leadership though vision
 - 31.8% Sufficient staffing levels
 - 31.8% State partnership with local community
 - 30.6% State-level leadership through action
 - 25.9% State-level program accountability
 - 21.2% Staff competency
 - 21.2% Relevant technical assistance
 - 18.8% Data accessibility

- 18.8% State-level program efficiency
- 15.3% Relevant training
- 14.1% Data uniformity
- 14.1% Other
- 8.2% Data relevancy
- 4.7% Laboratory capacity

State Responsibility 4: Assure appropriate organized statewide effort to develop and maintain essential personal, educational, and environmental health services

- 1. Should the future California Department of Public Health be responsible for this duty?
 - 37.6% Completely agree
 - 24.7% Somewhat agree
 - 3.5% Somewhat disagree
 - 1.2% Completely disagree
 - 5.9% Don't know
- 2. How effectively do California's current public health programs perform this duty?

0%	Completely effective
29.4%	Somewhat effective
27.1%	Somewhat ineffective
2.4%	Completely ineffective
15.3%	Don't know

3. In your opinion, what factors are barriers or challenges to the state's ability to perform this duty?

45.9% Sufficient funding level	S
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- 36.5% Sufficient staffing levels
- 34.1% State-level leadership though vision
- 31.8% State-level leadership through action
- 29.4% State partnership with local public health department
- 24.7% State partnership with local community
- 17.6% State-level program accountability
- 15.3% Staff competency
- 12.9% State-level program efficiency
- 11.8% Relevant training
- 11.8% Relevant technical assistance
- 11.8% Other
- 4.7% Data uniformity
- 4.7% Data relevancy
- 4.7% Laboratory capacity
- 3.5% Data accessibility

State Responsibility 5: Guarantee a minimum set of essential health services

1. Should the future California Department of Public Health be responsible for this duty?

27.1%	Completely agree
22.4%	Somewhat agree
16.5%	Somewhat disagree
3.5%	Completely disagree
7%	Don't know

2. How effectively do California's current public health programs perform this duty?

1.2%	Completely effective
21.2%	Somewhat effective
23.5%	Somewhat ineffective
11.8%	Completely ineffective
12.9%	Don't know

3. In your opinion, what factors are barriers or challenges to the state's ability to perform this duty?

45.9%	Sufficient	funding	levels
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- 31.8% State partnership with local public health department
- 29.4% Sufficient staffing levels
- 27.1% State-level leadership through action
- 25.9% State-level leadership though vision
- 23.5% State partnership with local community
- 17.6% State-level program efficiency
- 17.6% State-level program accountability
- 14.1% Staff competency
- 14.1% Other
- 12.9% Relevant technical assistance
- 11.8% Relevant training
- 9.4% Data uniformity
- 8.2% Data accessibility
- 7.1% Laboratory capacity
- 5.9% Data relevancy

State Responsibility 6: Support of local service capacity, especially when disparities in local ability to raise revenue and/or administer programs require subsidies, technical assistance, or direct action by the state to achieve adequate service levels

1. Should the future California Department of Public Health be responsible for this duty?

37.6%	Completely agree
24.7%	Somewhat agree
3.5%	Somewhat disagree
1.2%	Completely disagree
7%	Don't know

2. How effectively do California's current public health programs perform this duty?

0%	Completely effective
17.6%	Somewhat effective
28.2%	Somewhat ineffective
15.3%	Completely ineffective
12.9%	Don't know

3. In your opinion, what factors are barriers or challenges to the state's ability to perform this duty?

50.6%	Sufficient funding levels
38.8%	State partnership with local public health department
37.6%	Sufficient staffing levels
35.3%	State-level leadership through action
28.2%	State partnership with local community
23.5%	State-level leadership though vision
18.8%	State-level program accountability
17.6%	State-level program efficiency
16.5%	Staff competency
15.3%	Relevant training
15.3%	Relevant technical assistance

- 9.4% Other
- 5.9% Laboratory capacity
- 3.5% Data uniformity
- 3.5% Data accessibility
- 3.5% Data relevancy

State Responsibility 7: Clearly delineate the basic authority and responsibility entrusted to public health agencies, boards, and officials at the state and local levels and the relationships between them

1. Should the future California Department of Public Health be responsible for this duty?

40%	Completely agree
17.6%	Somewhat agree
5.9%	Somewhat disagree
4.7%	Completely disagree
4.7%	Don't know

2. How effectively do California's current public health programs perform this duty?

0%	Completely effective
24.7%	Somewhat effective
31.8%	Somewhat ineffective
1.2%	Completely ineffective
15.3%	Don't know

3. In your opinion, what factors are barriers or challenges to the state's ability to perform this duty?

38.8%	State partnership with local public health department
34.1%	State-level leadership through action
29.4%	State-level leadership though vision
23.5%	Sufficient funding levels
21.2%	Sufficient staffing levels
20%	State-level program accountability
18.8%	State partnership with local community
11.8%	State-level program efficiency
11.8%	Relevant technical assistance
11.8%	Other
9.4%	Staff competency
8.2%	Relevant training
5.9%	Data uniformity
3.5%	Data accessibility

- 2.4% Data relevancy
- 2.4% Laboratory capacity

SECTION 3: DEMOGRAPHICS

1. Please indicate how long (in years) you have worked in the field of public health.

7.1% 0-4 years

12.9%	5-9 years
8.2%	10-14 years
16.5%	15-19 years
25.9%	20+ years

2. Please indicate whether you work for the State Public Health Department or for a Local Public Health Department.

20%	State Public Health Department
50.6%	Local Public Health Department (please answer Question 3 below)

3. Please indicate the county in which you work.

Respondents indicated employment in 32 different local public health departments.

Bibliography

- Association of State and Territorial Health Officials (ASTHO). (2006). An Examination of State Use of Performance Standards. Retrieved February 19, 2007 from www. astho.org.
- Breslow, L., & Gale, T. (Eds.). (2006). Encyclopedia of Public Health. "Environmental Determinants of Health." Retrieved August 10, 2007 from http://health.enotes. com/public-health-encyclopedia/environmental-determinants-health.
- California Assembly. (May, 2006). Agenda: Joint Subcommittee Informational Hearing On Emergency Preparedness, Homeland Security & Public Health. Retrieved August 26, 2007 from http://www.assembly.ca.gov/acs/committee/c22/ hearing/2006/may%202%20%202006%20-%20joint%20hearing%20agenda.doc.
- California Conference of Local Health Officers (CCLHO). (n.d.). "Mission/Purpose." Retrieved February 2, 2007 from http://www.dhs.ca.gov/cclho/.
- California Office of the Governor. (2006, September 14). Governor Schwarzenegger Signs Legislation to Enhance Public Health Response and Emergency Preparedness. Retrieved February 2, 2007 from http://www.gov.ca.gov.
- California State Archives. (n.d.) Records of the Dept. of Public Health. Collection Number: R384. Sacramento, CA: California State Archives.

California Department of Health Services (CDHS). (2002). Leadership for a Healthy

California: A Strategic Plan for the California Department of Health Services. Sacramento, CA: California Department of Health Services. Retrieved August 10, 2007 from http://www.dhs.ca.gov/hisp/chs/OHIR/hp2010/strategicplan.pdf.

- Centers for Disease Control and Prevention (CDC). (n.d.). The Essential Public Health Services. Retrieved February 19, 2007 from http://www.cdc.gov/od/ocphp/ nphpsp/EssentialPHServices.htm.
- Centers for Disease Control and Prevention (CDC). (n.d.). National Public Health Performance Standards Program: State Public Health Performance Assessment (State). Version 1.0. Retrieved February 19, 2007 from http://www.astho.org/ pubs/pmstate.pdf.
- Centers for Disease Control and Prevention (CDC). (n.d.). National Public Health Performance Standards Program (NPHPSP). Fact Sheet. Retrieved February 19, 2007 from http://www.cdc.gov/od/ocphp/nphpsp/.
- Center for Health Improvement. (2007, April 19). Proceedings of California Health Policy Forum: The Transformation of Public Health—A Golden Opportunity in the Golden State. Sacramento, CA.
- County Health Executives Association of California (CHEAC). (n.d.). "Home." Retrieved February 2, 2007 from http://www.cheac.org.
- Department of Health. (1973). News Release #97: New Health Department Merges Old Institutions. California Sate Archives: Sacramento, California.

- Fowler, Hugh. (1985). The Reorganization of the California Department of Health in 1973 and 1978 (Doctoral dissertation, University of California, Davis, 1985).Retrieved from California Research Bureau, Control #: AFY-6377.
- Handler, A.S., & Turnock, B.J. (1996). Local Health Department Effectiveness in addressing the Core Functions of Public Health: Essential Ingredients. *Journal of Public Health Policy*, 17(4), 460-483. Retrieved February 19, 2007 from JSTOR Database.
- Hurt, Elsey. (1937). "California State Government: An Outline of Its Administrative Organization From 1850 to 1936." Bureau of Public Administration of the University of California. Sacramento, California.
- Institute of Medicine. (1988). *The Future of Public Health*. Washington, D.C.: National Academy Press.
- Institute of Medicine. (2003). *The Future of the Public's Health*. Washington, D.C.: The National Academies Press.
- Legislative Analyst's Office. (May, 2004). Letter to Honorable Senator Deborah Ortiz. Sacramento, California.
- Legislative Analyst's Office. (February, 2006). A Perspective on Emergencies and Disasters in California. Retrieved August 26, 2007 from http://www.lao.ca.gov/ analysis_2006/2006_pandi/pi_06_anl06.html.

- Little Hoover Commission (LHC). (2003, April). To Protect and Prevent: Rebuilding California's Public Health System. Retrieved February 2, 2007 from http://www. lhc.ca.gov/lhcdir/report170.html.
- Little Hoover Commission (LHC). (2005, June). Recommendations for Emergency Preparedness and Public Health. Retrieved February 2, 2007 from http://www. lhc.ca.gov/lhcdir/report170a.html.
- Lasker, R. D. (1997). *Medicine & Public Health: The Power of Collaboration*. New York: New York Academy of Medicine.
- National Association of County and City Health Officers (NACCHO). (October 1998). Research Brief: NACCHO Survey Examines State/Local Health Department Relationships. Retrieved February 9, 2007 from http://www.naccho.org.
- Philp, J. & Merrill, M.H. (1956). A Pattern for State-Local Relationships in Public Health. *American Journal of Public Health*, 46, 1504-1512.
- Public Health Functions Steering Committee. (1994). Public Health in America, fall 1994. Retrieved April 12, 2007 from http://www.health.gov/phfunctions/public. htm.
- RAND Corporation. (2004, August). Public Health Preparedness in California: Lessons Learned from Seven Health Jurisdictions. Retrieved February 2, 2007 from http:// www.rand.org/pubs/technical_reports/TR181/index.html.

- RAND Corporation. (2006). Organizing State and Local Health Departments for Public Health Preparedness. Retrieved February 2, 2007 from http://www.rand.org/pubs/ technical_reports/TR318/.
- Scott, H.D., Tierney, J.T., & Waters, W.J. (1990). The Future of Public Health: A Survey of the States. *Journal of Public Health Policy*, 11(3), 296-304. Retrieved February 19, 2007 from JSTOR Database.
- Senate Health Committee. (2005, March 16). Staff Analysis of Senate Bill 162 (Ortiz). Sacramento, CA: California Senate. Retrieved January 23, 2007 from http:// www.leginfo.ca.gov.
- Scutchfield, F.D., & Keck, C.W. (1998). Structure and Function of the Public Health System in the United States. *Public Health & Preventive Medicine* (14th ed.), 1131-1137.
- Scutchfield, F.D., Hiltabiddle, S.E., Rawding, N., & Violante, T. (1997). Compliance with the Recommendations of the Institute of Medicine Report, The Future of Public Health: A Survey of Local Health Departments. *Journal of Public Health Policy*, 18(2), 155-166. Retrieved February 19, 2007 from JSTOR Database.